```
=> fil reg
FILE 'REGISTRY' ENTERED AT 08:12:33 ON 20 NOV 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES:   18 NOV 2001  HIGHEST RN 370856-36-3
DICTIONARY FILE UPDATES:  18 NOV 2001  HIGHEST RN 370856-36-3

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can tot

L64  ANSWER 1 OF 18  REGISTRY  COPYRIGHT 2001 ACS
RN   121250-47-3  REGISTRY
CN   Octadecadienoic acid (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   9,11(or 10,12)-Octadecadienoic acid
CN   Conjugated linoleic acid
MF   C18 H32 O2
CI   IDS, COM
SR   US Environmental Protection Agency
LC   STN Files:   ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS,
       CHEMCATS, CHEMLIST, CIN, PIRA, PROMT, TOXCENTER, TOXLIT, USPATFULL
     Other Sources:   DSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)

     CM   1

     CRN  57-11-4
     CMF  C18 H36 O2
```

$HO_2C-(CH_2)_{16}-Me$

```
             246 REFERENCES IN FILE CA (1967 TO DATE)
               9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             252 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE   1:  135:317836

REFERENCE   2:  135:317744

REFERENCE   3:  135:303248

REFERENCE   4:  135:287980

REFERENCE   5:  135:287975

REFERENCE   6:  135:272342

REFERENCE   7:  135:270582

REFERENCE   8:  135:256524
```

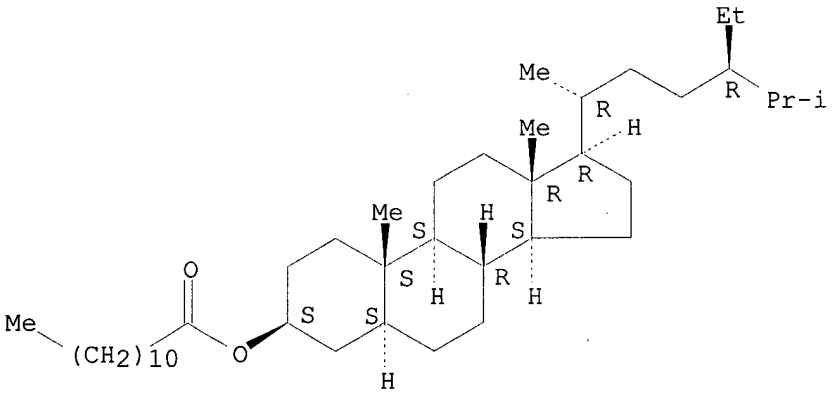
Point of Contact:
Jan Delaval
Librarian-Physical Sciences
CM1 1E01 Tel: 308-4498

REFERENCE 9: 135:241408

REFERENCE 10: 135:241393

L64 ANSWER 2 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **109033-78-5** REGISTRY
CN Stigmastan-3-ol, dodecanoate, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5.alpha.-Stigmastan-3.beta.-ol, laurate (6CI)
OTHER NAMES:
CN .beta.-Sitostanol laurate
FS STEREOSEARCH
MF C41 H74 O2
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXLIT
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:179913

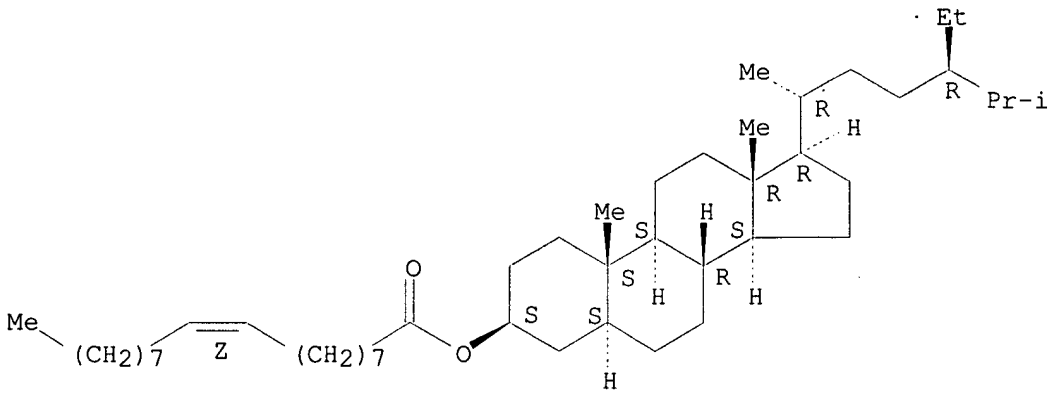
REFERENCE 2: 130:347399

REFERENCE 3: 130:25230

REFERENCE 4: 129:36452

L64 ANSWER 3 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **108515-19-1** REGISTRY
CN Stigmastan-3-ol, (9Z)-9-octadecenoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5.alpha.-Stigmastan-3.beta.-ol, oleate (6CI)
OTHER NAMES:
CN .beta.-Sitostanol oleate
FS STEREOSEARCH
MF C47 H84 O2
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1967 TO DATE)
11 REFERENCES IN FILE CAPLUS (1967 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 134:131709

REFERENCE 2: 134:101068

REFERENCE 3: 134:86425

REFERENCE 4: 134:86422

REFERENCE 5: 133:335395

REFERENCE 6: 133:227781

REFERENCE 7: 132:166391

REFERENCE 8: 132:166390

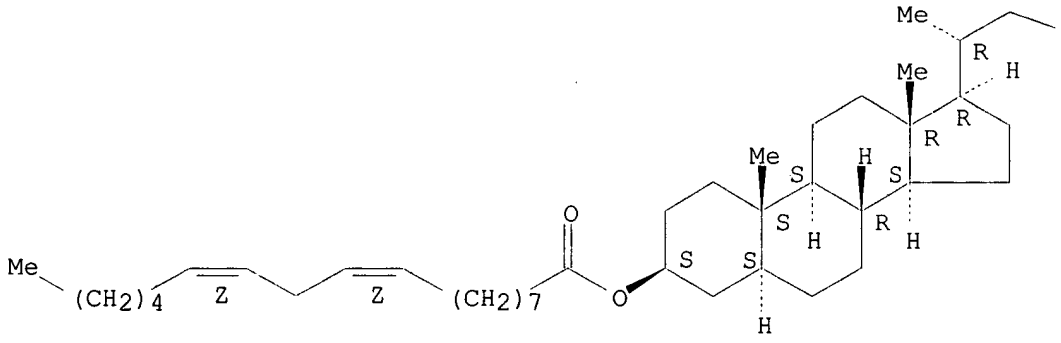
REFERENCE 9: 132:13225

REFERENCE 10: 130:252534

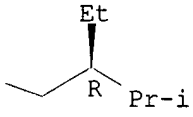
L64 ANSWER 4 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **108514-64-3** REGISTRY
CN Stigmastan-3-ol, (9Z,12Z)-9,12-octadecadienoate, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5.alpha.-Stigmastan-3.beta.-ol, linoleate (6CI)
CN Stigmastan-3-ol, 9,12-octadecadienoate, [3.beta.(9Z,12Z),5.alpha.]-
OTHER NAMES:
CN .beta.-Sitostanol linoleate
CN 22-Dihydrospinasteryl linoleate
FS STEREOSEARCH
MF C47 H82 O2
SR CAOLD
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, TOXLIT
(*File contains numerically searchable property data)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:147443

REFERENCE 2: 134:101068

REFERENCE 3: 134:86425

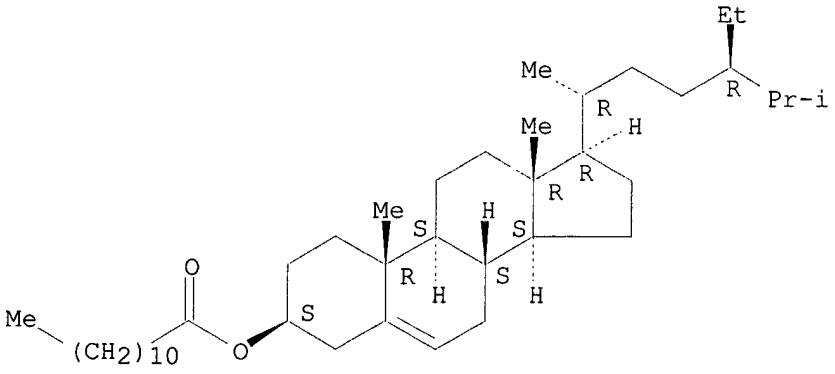
REFERENCE 4: 132:13225

REFERENCE 5: 130:25230

REFERENCE 6: 110:230383

L64 ANSWER 5 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **41005-65-6** REGISTRY
CN Stigmast-5-en-3-ol, dodecanoate, (3.beta.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN .beta.-Sitosterol, laurate (6CI, 7CI)
OTHER NAMES:
CN .beta.-Sitostenyl laurate
CN .beta.-Sitosteryl laurate
FS STEREOSEARCH
MF C41 H72 O2
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

14 REFERENCES IN FILE CA (1967 TO DATE)
14 REFERENCES IN FILE CAPLUS (1967 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 134:70652

REFERENCE 2: 132:283924

REFERENCE 3: 130:347399

REFERENCE 4: 129:166219

REFERENCE 5: 128:196677

REFERENCE 6: 116:57644

REFERENCE 7: 115:287165

REFERENCE 8: 110:170268

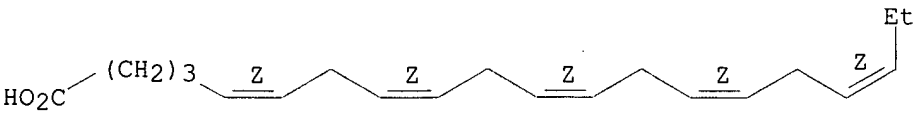
REFERENCE 9: 105:112033

REFERENCE 10: 103:213396

L64 ANSWER 6 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **10417-94-4** REGISTRY
CN 5,8,11,14,17-Eicosapentaenoic acid, (5Z,8Z,11Z,14Z,17Z)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5,8,11,14,17-Eicosapentaenoic acid (6CI)
CN 5,8,11,14,17-Eicosapentaenoic acid, (all-Z)- (8CI)
OTHER NAMES:
CN (all-cis)-5,8,11,14,17-Eicosapentaenoic acid
CN (all-Z)-.DELTA.5,8,11,14,17-Eicosapentaenoic acid
CN (all-Z)-5,8,11,14,17-Eicosapentaenoic acid
CN 5Z,8Z,11Z,14Z,17Z-Eicosapentaenoic acid
CN Eicosapentaenoic acid
CN Icosapent
CN Icosapentaenoic acid
CN Timnodonic acid
FS STEREOSEARCH
DR 25377-48-4
MF C20 H30 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIUDB, MRCK*, PHAR, PROMT,

TOXCENTER, TOXLIT, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: WHO

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5773 REFERENCES IN FILE CA (1967 TO DATE)
106 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5787 REFERENCES IN FILE CAPLUS (1967 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:317832

REFERENCE 2: 135:317648

REFERENCE 3: 135:317642

REFERENCE 4: 135:316102

REFERENCE 5: 135:316090

REFERENCE 6: 135:314831

REFERENCE 7: 135:313840

REFERENCE 8: 135:313618

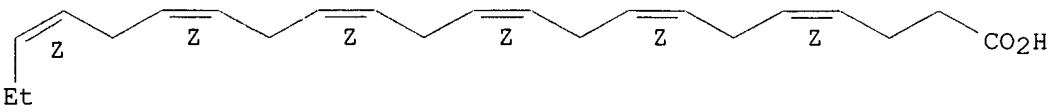
REFERENCE 9: 135:308908

REFERENCE 10: 135:303263

L64 ANSWER 7 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **6217-54-5** REGISTRY
CN 4,7,10,13,16,19-Docosahexaenoic acid, (4Z,7Z,10Z,13Z,16Z,19Z)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4,7,10,13,16,19-Docosahexaenoic acid, (all-Z)- (8CI)
CN Docosahexaenoic acid (6CI)
OTHER NAMES:
CN (4Z,7Z,10Z,13Z,16Z,19Z)-Docosahexaenoic acid
CN (all-Z)-4,7,10,13,16,19-Docosahexaenoic acid
CN .DELTA.4,7,10,13,16,19-Docosahexaenoic acid
CN 4-cis,7-cis,10-cis,13-cis,16-cis,19-cis-Docosahexaenoic acid
CN all-cis-4,7,10,13,16,19-Docosahexaenoic acid
CN all-Z-Docosahexaenoic acid
CN Cervonic acid
CN DHA
CN Doconexent
FS STEREOSEARCH
DR 25377-50-8
MF C22 H32 O2
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CIN, CSCHEM, EMBASE, MRCK*, PROMT, TOXCENTER, TOXLIT, USAN, USPATFULL

(*File contains numerically searchable property data)
Other Sources: WHO

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6155 REFERENCES IN FILE CA (1967 TO DATE)
115 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6169 REFERENCES IN FILE CAPLUS (1967 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:317832

REFERENCE 2: 135:317648

REFERENCE 3: 135:317642

REFERENCE 4: 135:316828

REFERENCE 5: 135:316288

REFERENCE 6: 135:316102

REFERENCE 7: 135:316090

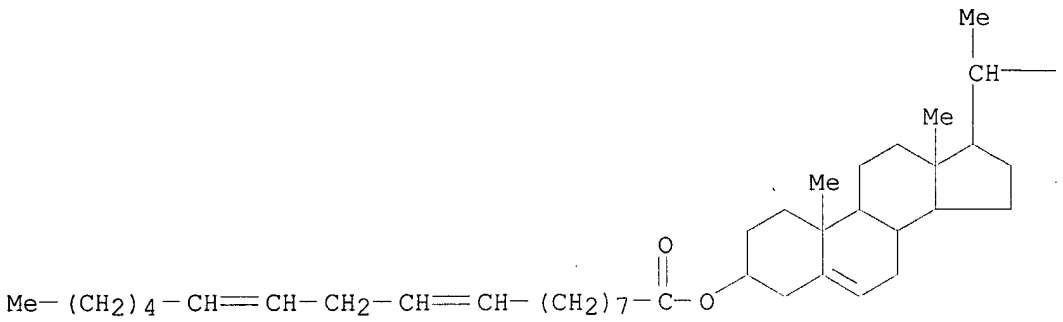
REFERENCE 8: 135:313922

REFERENCE 9: 135:313618

REFERENCE 10: 135:312906

L64 ANSWER 8 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **3577-13-7** REGISTRY
CN Stigmast-5-en-3-ol, (9Z,12Z)-9,12-octadecadienoate, (3.beta.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN .beta.-Sitosterol linoleate (6CI, 7CI)
CN Linoleic acid, stigmast-5-en-3.beta.-yl ester (8CI)
CN Stigmast-5-en-3-ol, 9,12-octadecadienoate, [3.beta.(9Z,12Z)]-
CN Stigmast-5-en-3.beta.-ol, linoleate (8CI)
OTHER NAMES:
CN .beta.-Sitosteryl linoleate
CN Sitosteryl linoleate
MF C47 H80 O2
LC STN Files: ANABSTR, BEILSTEIN*, CA, CAOLD, CAPLUS, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

PAGE 1-A



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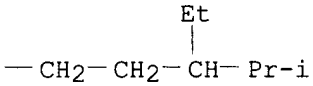


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

31 REFERENCES IN FILE CA (1967 TO DATE)
31 REFERENCES IN FILE CAPLUS (1967 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:147443

REFERENCE 2: 135:106435

REFERENCE 3: 134:101068

REFERENCE 4: 134:86425

REFERENCE 5: 132:13225

REFERENCE 6: 131:243460

REFERENCE 7: 130:25230

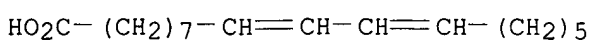
REFERENCE 8: 127:292300

REFERENCE 9: 124:341383

REFERENCE 10: 121:53930

L64 ANSWER 9 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **1839-11-8** REGISTRY
CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN .DELTA.9,11-Octadecadienoic acid
CN 9,11-Linoleic acid
CN Conjugated linoleic acid
CN Nouracid DE 554
CN Ricineic acid
CN Ricinenic acid
FS 3D CONCORD
MF C18 H32 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, EMBASE,

IFICDB, IFIPAT, IFIUDB, MEDLINE, PROMT, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)
Other Sources: NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

159 REFERENCES IN FILE CA (1967 TO DATE)
25 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
160 REFERENCES IN FILE CAPLUS (1967 TO DATE)
14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:317836

REFERENCE 2: 135:317648

REFERENCE 3: 135:303248

REFERENCE 4: 135:287781

REFERENCE 5: 135:262274

REFERENCE 6: 135:251774

REFERENCE 7: 135:189972

REFERENCE 8: 135:175768

REFERENCE 9: 135:91782

REFERENCE 10: 135:45296

L64 ANSWER 10 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **544-63-8** REGISTRY
CN Tetradecanoic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Myristic acid (8CI)
OTHER NAMES:
CN 1-Tridecanecarboxylic acid
CN Edenor C 14
CN Emery 655
CN Hystrene 9014
CN Kortacid 1499
CN n-Tetradecan-1-oic acid
CN n-Tetradecanoic acid
CN n-Tetradecoic acid
CN NAA 104
CN NAA 142
CN Neo-Fat 14
CN Philacid 1400
CN Prifac 2942
CN Univol U 316S
FS 3D CONCORD
DR 45184-05-2
MF C14 H28 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,

NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER,
TOXLIT, TRCTHERMO*, TULSA, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

$HO_2C-(CH_2)_{12}-Me$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13393 REFERENCES IN FILE CA (1967 TO DATE)
565 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13418 REFERENCES IN FILE CAPLUS (1967 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:320479

REFERENCE 2: 135:318646

REFERENCE 3: 135:317642

REFERENCE 4: 135:317586

REFERENCE 5: 135:316296

REFERENCE 6: 135:316102

REFERENCE 7: 135:315915

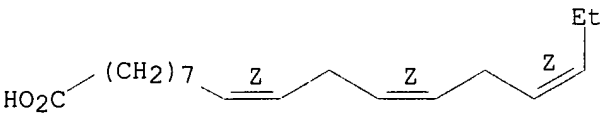
REFERENCE 8: 135:312906

REFERENCE 9: 135:308707

REFERENCE 10: 135:308664

L64 ANSWER 11 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **463-40-1** REGISTRY
CN 9,12,15-Octadecatrienoic acid, (9Z,12Z,15Z)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9,12,15-Octadecatrienoic acid, (Z,Z,Z)-
CN Linolenic acid (8CI)
OTHER NAMES:
CN (Z,Z,Z)-Octadeca-9,12,15-trienoic acid
CN .alpha.-Linolenic acid
CN 9,12,15-all-cis-Octadecatrienoic acid
CN 9-cis,12-cis,15-cis-Octadecatrienoic acid
CN all-cis-9,12,15-Octadecatrienoic acid
CN cis,cis,cis-9,12,15-Octadecatrienoic acid
CN cis-.DELTA.9,12,15-Octadecatrienoic acid
CN cis-9,cis-12,cis-15-Octadecatrienoic acid
FS STEREOSEARCH
MF C18 H30 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE,
GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
NAPRALERT, NIOSHTIC, PIRA, PROMT, SPECINFO, TOXCENTER, TOXLIT, TULSA,
USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

12438 REFERENCES IN FILE CA (1967 TO DATE)
373 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
12460 REFERENCES IN FILE CAPLUS (1967 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:326226

REFERENCE 2: 135:322700

REFERENCE 3: 135:320479

REFERENCE 4: 135:317840

REFERENCE 5: 135:317832

REFERENCE 6: 135:317665

REFERENCE 7: 135:317648

REFERENCE 8: 135:317642

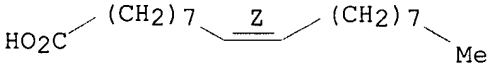
REFERENCE 9: 135:316288

REFERENCE 10: 135:316203

L64 ANSWER 12 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **112-80-1** REGISTRY
CN 9-Octadecenoic acid (9Z)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9-Octadecenoic acid (Z)-
CN Oleic acid (8CI)
OTHER NAMES:
CN .DELTA.9-cis-Octadecenoic acid
CN .DELTA.9-cis-Oleic acid
CN 9-cis-Octadecenoic acid
CN 9-Octadecenoic acid, (Z)-
CN cis-.DELTA.9-Octadecenoic acid
CN cis-9-Octadecenoic acid
CN cis-Oleic acid
CN D 100
CN D 100 (fatty acid)
CN Edenor ATiO5
CN Edenor FTiO5
CN Emersol 205
CN Emersol 211
CN Emersol 213NF
CN Emersol 214NF
CN Emersol 233
CN Emersol 6313NF
CN Extra Oleic 80R
CN Extra Oleic 90
CN Extra Oleic 99
CN Extra Olein 80

CN Extra Olein 90R
CN Extraolein 90
CN Industrene 105
CN Lunac O-CA
CN Lunac O-LL
CN Lunac O-P
CN NAA 35
CN Neo-Fat 92-04
CN Oleine 7503
CN Pamolyn 100
CN Priolene 6906
CN Priolene 6907
CN Priolene 6928
CN Priolene 6930
CN Priolene 6933
CN Vopcolene 27
CN Wecoline OO
CN Z-9-Octadecenoic acid
FS STEREOSEARCH
DR 8046-01-3, 56833-51-3, 17156-84-2
MF C18 H34 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TOXLIT, TULSA, USAN, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

31357 REFERENCES IN FILE CA (1967 TO DATE)
2015 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
31399 REFERENCES IN FILE CAPLUS (1967 TO DATE)
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:326694

REFERENCE 2: 135:326226

REFERENCE 3: 135:322700

REFERENCE 4: 135:321524

REFERENCE 5: 135:320815

REFERENCE 6: 135:320479

REFERENCE 7: 135:320322

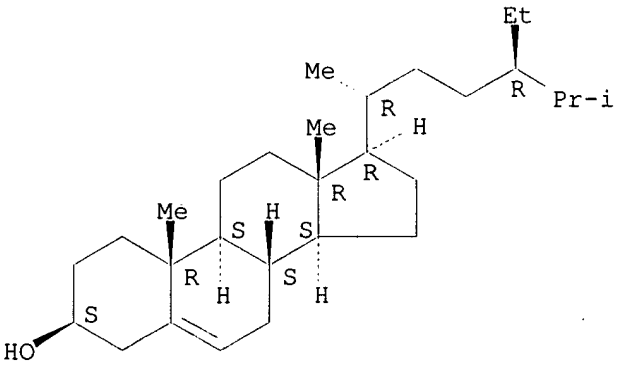
REFERENCE 8: 135:319750

REFERENCE 9: 135:319624

REFERENCE 10: 135:319622

L64 ANSWER 13 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **83-46-5** REGISTRY
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Nimbosterol (6CI)
CN Stigmast-5-en-3.beta.-ol (8CI)
OTHER NAMES:
CN (-)-.beta.-Sitosterol
CN (24R)-Ethylcholest-5-en-3.beta.-ol
CN (24R)-Stigmast-5-en-3.beta.-ol
CN .alpha.-Dihydrofucosterol
CN .beta.-Sitosterin
CN .beta.-Sitosterol
CN .DELTA.5-Stigmasten-3.beta.-ol
CN 22,23-Dihydrostigmasterol
CN 24.alpha.-Ethylcholesterol
CN Angelicin
CN Angelicin (steroid)
CN Azuprostat
CN Cinchol
CN Cupreol
CN Quebrachol
CN Rhamnol
CN SKF 14463
CN Sobatum
CN Stigmasterol, 22,23-dihydro-
FS STEREOSEARCH
DR 8003-23-4, 15764-35-9, 76772-70-8, 182512-23-8
MF C29 H50 O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DIPPR*, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TOXLIT, ULIDAT, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8929 REFERENCES IN FILE CA (1967 TO DATE)
140 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8945 REFERENCES IN FILE CAPLUS (1967 TO DATE)
12 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:317712

REFERENCE 2: 135:315876

REFERENCE 3: 135:308672

REFERENCE 4: 135:303132

REFERENCE 5: 135:301074

REFERENCE 6: 135:301046

REFERENCE 7: 135:301041

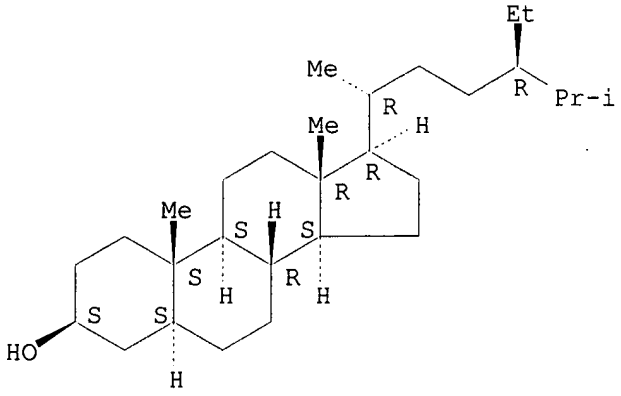
REFERENCE 8: 135:287978

REFERENCE 9: 135:285771

REFERENCE 10: 135:285769

L64 ANSWER 14 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **83-45-4** REGISTRY
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5.alpha.-Stigmastan-3.beta.-ol (6CI, 7CI, 8CI)
OTHER NAMES:
CN .beta.-Sitostanol
CN .beta.-Sitosterol, dihydro-
CN 24.alpha.-Ethylcholestanol
CN 5,6-Dihydro-.beta.-sitosterol
CN Dihydro-.beta.-sitosterol
CN Dihydrositosterin
CN Dihydrositosterol
CN Fucostanol
CN Sitostanol
CN Spinastanol
FS STEREOSEARCH
MF C29 H52 O
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, DDFU, DRUGU, EMBASE, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PIRA, PROMT, TOXCENTER, TOXLIT, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

568 REFERENCES IN FILE CA (1967 TO DATE)
32 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
571 REFERENCES IN FILE CAPLUS (1967 TO DATE)
21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:255577

REFERENCE 2: 135:236225

REFERENCE 3: 135:231714

REFERENCE 4: 135:231361

REFERENCE 5: 135:199960

REFERENCE 6: 135:194988

REFERENCE 7: 135:194987

REFERENCE 8: 135:194946

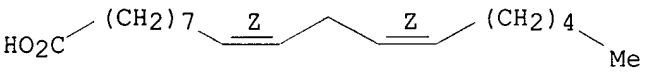
REFERENCE 9: 135:180195

REFERENCE 10: 135:179913

L64 ANSWER 15 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **60-33-3** REGISTRY
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 9,12-Octadecadienoic acid (Z,Z)-
CN Linoleic acid (8CI)
OTHER NAMES:
CN (Z,Z)-9,12-Octadecadienoic acid
CN .alpha.-Linoleic acid
CN 9,12-Octadecadienoic acid, (Z,Z)-
CN 9-cis,12-cis-Linoleic acid
CN 9Z,12Z-Linoleic acid
CN all-cis-9,12-Octadecadienoic acid
CN cis,cis-Linoleic acid
CN cis-.DELTA.9,12-Octadecadienoic acid
CN cis-9,cis-12-Octadecadienoic acid
CN Emersol 315
CN Extra Linoleic 90
CN Linolic acid
CN Polylin 515
CN Unifac 6550

FS STEREOSEARCH
MF C18 H32 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TOXLIT, TULSA, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

23967 REFERENCES IN FILE CA (1967 TO DATE)
1054 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
23999 REFERENCES IN FILE CAPLUS (1967 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:326226

REFERENCE 2: 135:322700

REFERENCE 3: 135:320479

REFERENCE 4: 135:317840

REFERENCE 5: 135:317715

REFERENCE 6: 135:317670

REFERENCE 7: 135:317665

REFERENCE 8: 135:317642

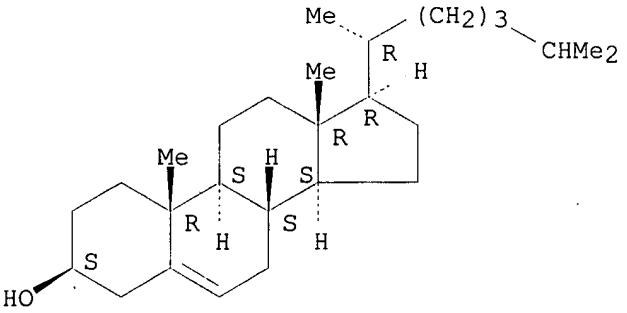
REFERENCE 9: 135:317586

REFERENCE 10: 135:316828

L64 ANSWER 16 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **57-88-5** REGISTRY
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cholesterol (8CI)
OTHER NAMES:
CN (-)-Cholesterol
CN .DELTA.5-Cholesten-3.beta.-ol
CN 3.beta.-Hydroxycholest-5-ene
CN 5:6-Cholesten-3.beta.-ol
CN Cholest-5-en-3.beta.-ol
CN Cholesterin
CN Cholesteryl alcohol
CN Dythol
CN Lidinit
CN Lidinite
CN Provitamin D

FS STEREOSEARCH
DR 209124-38-9, 218965-24-3
MF C27 H46 O
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TOXLIT, TULSA, ULIDAT, USAN, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

74637 REFERENCES IN FILE CA (1967 TO DATE)
7986 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
74747 REFERENCES IN FILE CAPLUS (1967 TO DATE)
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:326766

REFERENCE 2: 135:325059

REFERENCE 3: 135:322757

REFERENCE 4: 135:322696

REFERENCE 5: 135:322695

REFERENCE 6: 135:318784

REFERENCE 7: 135:318056

REFERENCE 8: 135:317851

REFERENCE 9: 135:317846

REFERENCE 10: 135:317843

L64 ANSWER 17 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **57-11-4** REGISTRY
CN Octadecanoic acid (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-Heptadecanecarboxylic acid
CN 17FA
CN 400JB9103-88
CN A 1760

CN Adeka Fatty Acid SA 910
CN Barolub FTA
CN Century 1210
CN Century 1220
CN Century 1230
CN Century 1240
CN Edenor C 18/98
CN Edenor HT-JG 60
CN Edenor ST 1
CN Edenor ST 20
CN Emersol 120
CN Emersol 153NF
CN Emersol 6349
CN F 3
CN F 3 (lubricant)
CN Humko Industrene R
CN Hydrofol Acid 150
CN Hydrofol Acid 1895
CN Hystrene 4516
CN Hystrene 80
CN Hystrene 9718
CN Hystrene 9718NF
CN Hystrene 9718NFFG
CN Hystrene S 97
CN Hystrene T 70
CN Industrene 8718
CN Industrene 9018
CN Industrene R
CN Kam 1000
CN Kam 2000
CN Kam 3000
CN Kortacid 1895
CN Loxiol G 20
CN Lunac 30
CN Lunac S 20
CN Lunac S 30
CN Lunac S 40
CN Lunac S 50
CN Lunac S 90
CN Lunac S 90KC
CN Lunac S 98
CN Lunac YA
CN n-Octadecanoic acid
CN NAA 173
CN NAA 175S
CN NAA 180
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
FS 3D CONCORD
DR 8013-28-3, 8023-06-1, 8037-40-9, 8037-83-0, 8039-51-8, 8039-52-9, 8039-53-0, 8039-54-1, 58392-66-8, 134503-33-6, 82497-27-6, 39390-61-9, 197923-10-7
MF C18 H36 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TOXLIT, TRCTHERMO*, TULSA, USAN, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

$HO_2C-(CH_2)_{16}-Me$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

32537 REFERENCES IN FILE CA (1967 TO DATE)
2400 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
32584 REFERENCES IN FILE CAPLUS (1967 TO DATE)
19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:326226

REFERENCE 2: 135:326011

REFERENCE 3: 135:322700

REFERENCE 4: 135:322549

REFERENCE 5: 135:322511

REFERENCE 6: 135:321237

REFERENCE 7: 135:320479

REFERENCE 8: 135:320211

REFERENCE 9: 135:320149

REFERENCE 10: 135:320148

L64 ANSWER 18 OF 18 REGISTRY COPYRIGHT 2001 ACS
RN **57-10-3** REGISTRY
CN Hexadecanoic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Palmitic acid (7CI, 8CI)
OTHER NAMES:
CN 1-Pentadecanecarboxylic acid
CN Cetylic acid
CN Emersol 143
CN Hydrofol Acid 1690
CN Hystrene 9016
CN Kortacid 1698
CN Loxiol EP 278
CN Lunac P 95
CN Lunac P 95KC
CN n-Hexadecanoic acid
CN n-Hexadecoic acid
CN NAA 160
CN Neo-Fat 16
CN PA 900
CN Palmitinic acid
CN Pentadecanecarboxylic acid
CN Prifac 2960
FS 3D CONCORD
DR 60605-23-4, 66321-94-6, 116860-99-2, 212625-86-0
MF C16 H32 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TOXLIT, TRCTHERMO*, TULSA, ULIDAT, USPATFULL,

VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

$HO_2C-(CH_2)_{14}-Me$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

28212 REFERENCES IN FILE CA (1967 TO DATE)
1089 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
28258 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:326226

REFERENCE 2: 135:322700

REFERENCE 3: 135:322604

REFERENCE 4: 135:322549

REFERENCE 5: 135:322025

REFERENCE 6: 135:322004

REFERENCE 7: 135:320479

REFERENCE 8: 135:319503

REFERENCE 9: 135:319286

REFERENCE 10: 135:317726

=> d his

(FILE 'HOME' ENTERED AT 07:38:42 ON 20 NOV 2001)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:38:55 ON 20 NOV 2001

FILE 'REGISTRY' ENTERED AT 07:38:58 ON 20 NOV 2001
E CHOLESTEROL/CN

FILE 'HCAPLUS' ENTERED AT 07:38:59 ON 20 NOV 2001
S E3

FILE 'REGISTRY' ENTERED AT 07:39:01 ON 20 NOV 2001
L1 1 S E3/CN

FILE 'HCAPLUS' ENTERED AT 07:39:02 ON 20 NOV 2001
L2 75044 S L1
L3 119556 S CHOLESTEROL
L4 137146 S ?CHOLESTER?
E ANTICHOLESTER/CT
E E5+ALL
L5 7518 S E3,E4,E2+NT
E FABRY B/AU
L6 237 S E3,E7
E COGNIS/PA,CS
L7 520 S E3,E4
L8 7 S L2-L5 AND L6,L7

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L9            5 S L8 AND (?PHYTO? OR FATTY ACID)
L10           4 S L8 AND (?STENOL? OR ?STANOL?)
L11           5 S L9,L10
L12           6 S L8 AND STEROL
L13           4 S L11 AND L12
L14           5 S L11,L13
L15           4 S L14 NOT 46/SC
L16           0 S BETA  () ?SITOSTENOL?
L17         107 S BETA  () ?SITOSTANOL?
L18        8352 S BETA  () ?SITOSTEROL?

     FILE 'REGISTRY' ENTERED AT 07:49:11 ON 20 NOV 2001
L19           1 S 83-46-5
L20           1 S 83-45-4
L21           2 S L19,L20
                SEL RN
L22          55 S E1-E2/CRN

     FILE 'HCAPLUS' ENTERED AT 07:51:29 ON 20 NOV 2001
L23        9103 S L21
L24       11039 S L17,L18,L23
L25         109 S L24 AND L5
L26        3285 S L24 AND L2-L4
L27         109 S L25 AND L26
                E FATTY ACIDS/CT
                E E3_ALL
                E FATTY ACIDS/CT
                E E3+ALL
L28      264426 S E6+NT
L29          21 S L28 AND L27
L30         871 S L28 AND L26
L31           4 S L15 AND L23,L24
L32           4 S L31 AND L26,L27,L28
                SEL RN

     FILE 'REGISTRY' ENTERED AT 07:56:02 ON 20 NOV 2001
L33          14 S E1-E14
L34           2 S L33 AND C18H32O2
L35           9 S L33 AND 4/NR
L36           7 S L35 NOT L21
L37           6 S L36 NOT L1

     FILE 'HCAPLUS' ENTERED AT 07:58:35 ON 20 NOV 2001
L38          52 S L37
L39           6 S L38 AND L5
L40          24 S L38 AND L2-L4
L41           6 S L39 AND L40
L42          24 S L29,L32,L41
L43         384 S L5 AND L28
L44          16 S L43 AND ?PHYTO?
L45           2 S L43 AND ?STENOL
L46          29 S L42,L44,L45
L47          17 S L46 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L48          18 S L32,L47
L49       33543 S L23,L24 OR ?STENOL OR STEROL
L50        6327 S L49 AND L28
L51        7383 S L49 AND FATTY ACID
L52         118 S L50,L51 AND ?CONJUGAT?
L53           3 S L52 AND L5
L54          19 S L48,L53
                SEL HIT RN
L55        1376 S L34 AND L49
L56           6 S L55 AND L5
L57           4 S L54 AND L56
L58          19 S L54,L57
L59           2 S L56 NOT L58
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L60           8 S L58 AND (CHIMPANZEES OR STEINER? OR BLENDS OR EGGS OR FISH OR
                SEL DN 5-8
L61           4 S L60 NOT E33-E36
L62           4 S L60 NOT L61
L63          15 S L58 NOT L62
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 08:12:17 ON 20 NOV 2001
L64          18 S E37-E54

     FILE 'REGISTRY' ENTERED AT 08:12:33 ON 20 NOV 2001

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 08:12:48 ON 20 NOV 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1947 - 20 Nov 2001  VOL 135 ISS 22
FILE LAST UPDATED: 18 Nov 2001  (20011118/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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 all substance data from the REGISTRY file.  Enter HELP FIRST for
 more information.

HCAplus now provides online access to patents and literature covered
in CA from 1947 to the present.  On April 22, 2001, bibliographic
information and abstracts were added for over 2.2 million references
published in CA from 1947 to 1966.


=> d l63 all hitstr tot

L63  ANSWER 1 OF 15  HCAPLUS  COPYRIGHT 2001 ACS
AN   2001:828929  HCAPLUS
TI   Reduced-cholesterol eggs with beneficial health and nutritive values
IN   Stock, Robert H.; Compton, James D.
PA   Liferight Foods, L.L.C., USA
SO   U.S., 6 pp.
     CODEN: USXXAM
DT   Patent
LA   English
IC   ICM  A23L001-32
     ICS  A23K001-18; A23K001-24
NCL  426614000
CC   17-7 (Food and Feed Chemistry)
     Section cross-reference(s): 18
FAN.CNT 1
     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
PI   US 6316041         B1   20011113      US 1999-427297   19991026
AB   A modified egg with enhanced health and nutritive values for human
     consumption contains less cholesterol and satd. fat, and contains a
     beneficial content of omega-3 unsatd. fatty acid.  A
     poultry feed for prodn. of the modified eggs includes a
     cholesterol-lowering agent, and omega-3 unsatd. fatty
     acid.  Thus, chicken feed contg. 4% canola oil and 7% canola meal
```

lowered cholesterol content of 50 g eggs from 215.2 to 183.7 mg. Enhancement of phytosterols in the diet (adding 0.16-0.63 g/kg feed) caused further decreases in cholesterol. Monascus red rice and copper citrate give further improvement.

ST egg cholesterol redn chicken diet

IT INDEXING IN PROGRESS

IT Rice (Oryza sativa)
(Monascus red, feed contg.; reduced-cholesterol eggs with beneficial health and nutritive values)

IT Egg, poultry
(duck; reduced-cholesterol eggs with beneficial health and nutritive values)

IT Egg, poultry
(goose; reduced-cholesterol eggs with beneficial health and nutritive values)

IT Chicken (Gallus domesticus)
(hens; reduced-cholesterol eggs with beneficial health and nutritive values)

IT **Sterols**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(phyto-; reduced-cholesterol eggs with beneficial health and nutritive values)

IT Canola oil
Soybean oil
Tall oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(phytosterols, of feed; reduced-cholesterol eggs with beneficial health and nutritive values)

IT **Fatty acids**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(polyunsatd., n-3; reduced-cholesterol eggs with beneficial health and nutritive values)

IT Monascus
(red rice; reduced-cholesterol eggs with beneficial health and nutritive values)

IT **Anticholesteremic agents**
Canola meal
Egg, poultry
(reduced-cholesterol eggs with beneficial health and nutritive values)

IT Carotenes
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(reduced-cholesterol eggs with beneficial health and nutritive values)

IT **Fatty acids**
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(satd.; reduced-cholesterol eggs with beneficial health and nutritive values)

IT Egg, poultry
(turkey; reduced-cholesterol eggs with beneficial health and nutritive values)

IT Feeding experiment
(with chickens; reduced-cholesterol eggs with beneficial health and nutritive values)

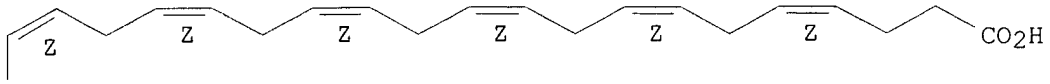
IT 7440-50-8D, Copper, derivs. 7758-98-7, Copper sulfate
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(of feed; reduced-cholesterol eggs with beneficial health and nutritive values)

IT 57-88-5, Cholesterol
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(reduced-cholesterol eggs with beneficial health and nutritive values)

IT 59-30-3, Folic acid 1406-18-4, vitamin E **6217-54-5**, Docosahexaenoic acid 7553-56-2, Iodine **121250-47-3**, **Conjugated** linoleic acid
RL: BOC (Biological occurrence); FFD (Food or feed use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(reduced-cholesterol eggs with beneficial health and nutritive values)
IT 10402-15-0, Copper citrate
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(reduced-cholesterol eggs with beneficial health and nutritive values)
IT **6217-54-5**, Docosahexaenoic acid **121250-47-3**, **Conjugated** linoleic acid
RL: BOC (Biological occurrence); FFD (Food or feed use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(reduced-cholesterol eggs with beneficial health and nutritive values)
RN 6217-54-5 HCAPLUS
CN 4,7,10,13,16,19-Docosahexaenoic acid, (4Z,7Z,10Z,13Z,16Z,19Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 121250-47-3 HCAPLUS
CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4
CMF C18 H36 O2

$HO_2C-(CH_2)_{16}-Me$

L63 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 2001:12195 HCAPLUS
DN 134:70652
TI Use of nanoscale **sterols** and **sterol** esters
IN Kropf, Christian; **Fabry, Bernd**; Biermann, Manfred; Dolhaine, Hans; Christophliemk, Peter; Schroder, Christine
PA **Cognis** Deutschland G.m.b.H., Germany
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM A23L001-30
CC 17-6 (Food and Feed Chemistry)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001000046	A1	20010104	WO 2000-EP5537	20000616

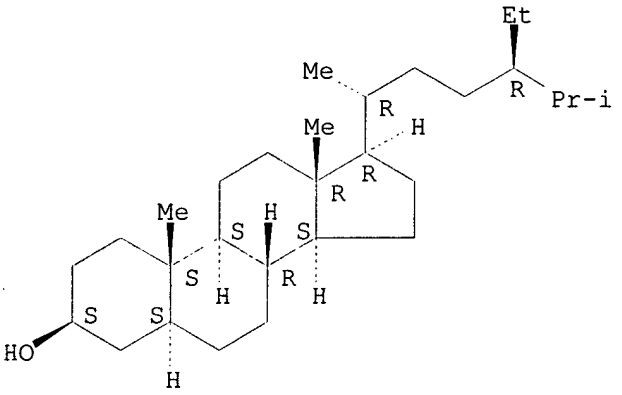
W: AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CR, CU, CZ, DM, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-141154 P 19990625
AB The invention relates to the use of nanoscale **sterols** and/or **sterol** esters with particle diams. between 10 and 300 nm as food additives and as active agents for producing **hypocholesteremic** products. The invention is characterized by the particular fineness of the particles compared to **sterols** and **sterol** esters of the prior art. This results in quicker resorption with oral

administration.
ST **sterol** ester food additive **anticholesteremic**
IT Food
(dietetic; use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT **Sterols**
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(esters; use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT Gelatins, biological studies
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(food coating; use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(frying; use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT **Sterols**
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(**phyto-**; use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT Meat
(sausage; use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT **Anticholesteremic agents**
Butter
Coating materials
Cocoa products
Colloids
Food additives
Margarine
Mayonnaise
Salad dressings
(use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT Edible oils
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT **Sterols**
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT 9012-76-4, Chitosan
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(food coating; use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
IT **83-45-4, .beta.-Sitostanol 83-46-5, .beta.-Sitosterol** 41005-65-6, .beta.-Sitostenyl laurate 108590-63-2, .beta.-Sitostanyl stearate
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
RE.CNT 8
RE
(1) Anon; STN CHEMICAL ABSTRAC
(2) Anon; STN CHEMICAL ABSTRAC
(3) Dior Christian Parfums; EP 0087993 A 1983 HCAPLUS
(4) Forbes Medi Tech Inc; WO 9959421 A 1999 HCAPLUS

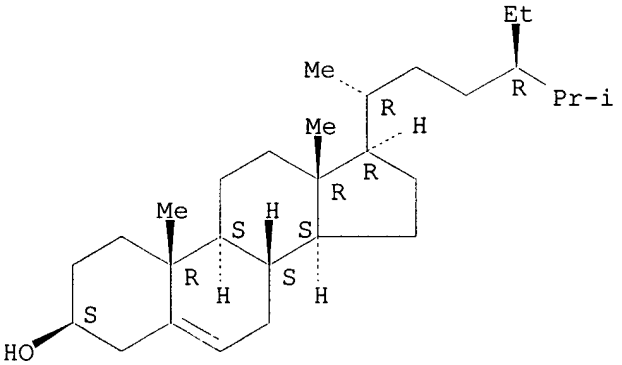
(5) Forbes Medi Tech Inc; WO 9963841 A 1999 HCAPLUS
(6) Hollenbrock, M; WO 0021490 A 2000 HCAPLUS
(7) Unilever Plc; EP 0897671 A 1999 HCAPLUS
(8) Univ Washington; WO 9960869 A 1999 HCAPLUS
IT **83-45-4, .beta.-Sitostanol 83-46-5, .beta.-Sitosterol**
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(use of nanoscale **sterols** and **sterol** esters as food additives and **hypocholesteremics**)
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:622405 HCAPLUS
DN 133:227781
TI Phytosterol protein complex
IN Corliss, Glenn; Finley, John W.; Basu, Hemendra N.; Kincs, Frank; Howard, Lenora
PA Monsanto Co., USA
SO U.S., 8 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A23D009-007
ICS A23L001-29
NCL 426613000

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17, 18
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6113972	A	20000905	US 1998-205534	19981203 <--

AB The present invention relates to phytosterol protein complex which is comprised of an amt. of phytosterol, an amt. of protein, and an amt. of edible oil, with the phytosterol protein complex designed to increase the bioavailability of the phytosterol, so that if consumed on a regular basis hopefully **cholesterol** levels will be lowered in the subject consuming the phytosterol protein complex. The present invention also relates to methods for forming the phytosterol protein complex, methods for potentially lowering **cholesterol** in humans, and methods for forming food products made from the phytosterol protein complex.

ST phytosterol protein oil **hypocholesterolemic**

IT Egg white
(Eggbeaters; **hypocholesteremic** phytosterol protein complex)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(edible; **hypocholesteremic** phytosterol protein complex)

IT Proteins, specific or class
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(egg yolk-specific, Eggcellent; **hypocholesteremic** phytosterol protein complex)

IT **Anticholesteremic agents**
Egg, poultry
Egg yolk
Food additives
(**hypocholesteremic** phytosterol protein complex)

IT Proteins, general, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(**hypocholesteremic** phytosterol protein complex)

IT Caseins, biological studies
Glutens
Glycerides, biological studies
Lecithins
Phospholipids, biological studies
Zeins
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**hypocholesteremic** phytosterol protein complex)

IT Canola oil
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lauric acid-high, Laurical; **hypocholesteremic** phytosterol protein complex)

IT Lipoproteins
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(low-d.; **hypocholesteremic** phytosterol protein complex)

IT Sterols
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(phyto-; **hypocholesteremic** phytosterol protein complex)

IT Milk
(powd. skim; **hypocholesteremic** phytosterol protein complex)

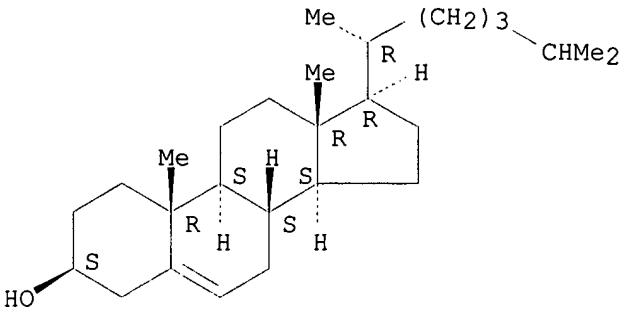
IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rice bran; **hypocholesteremic** phytosterol protein complex)

IT Lecithins
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(soya; **hypocholesteremic** phytosterol protein complex)

IT Proteins, general, biological studies

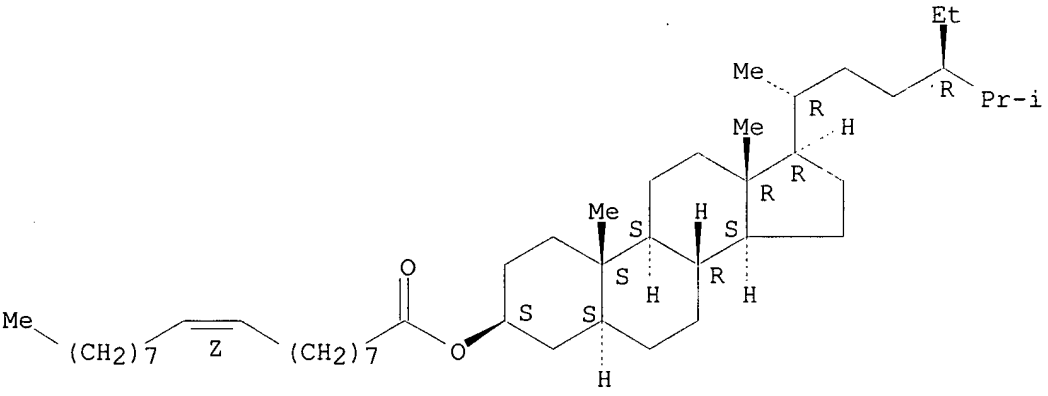
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(soybean; **hypocholesteremic** phytosterol protein complex)
IT Sterols
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(unsatd., stanols; **hypocholesteremic** phytosterol protein complex)
IT Proteins, specific or class
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(whey; **hypocholesteremic** phytosterol protein complex)
IT **57-88-5, Cholesterol,** biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(blood; **hypocholesteremic** phytosterol protein complex)
IT 83-45-4, .beta.-Sitostanol 83-46-5, .beta.-Sitosterol 83-48-7, Stigmasterol 23290-26-8, Avenasterol 106774-76-9 **108515-19-1**
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**hypocholesteremic** phytosterol protein complex)
RE.CNT 30
RE
(1) Anon; WO 9219640 1992 HCAPLUS
(2) Anon; WO 9500158 1995 HCAPLUS
(3) Anon; WO 9638047 1996 HCAPLUS
(4) Anon; WO 9806405 1998 HCAPLUS
(5) Anon; WO 9819556 1998 HCAPLUS
(6) Hallstrom; US 4160850 1979 HCAPLUS
(7) Heinemann, T; Atherosclerosis 1986, V61, P219 MEDLINE
(8) Ikeda; J of Lipid Research 1988, V29, P1573 HCAPLUS
(9) Ikeda; J of Lipid Research 1988, V29, P1583 HCAPLUS
(10) Inform; Corn Fiber Yields Cholesterol-Lowering Oil 1997, V8(11)
(11) Jandacek; US 3865939 1975 HCAPLUS
(12) Kudchodkar; Atheroschlerosis 1976, V23, P239 HCAPLUS
(13) Kudchodkar, B; Atherosclerosis 1976, V23, P239 HCAPLUS
(14) Kuksis; The Absorption of cholesterol and plant sterols by intestine Fat Absorption II 1987, P2
(15) Ling; Dietary Phytosterols Life Sciences 1995, V57(3), P195 HCAPLUS
(16) Lundmark; US 4218334 1980 HCAPLUS
(17) Lundmark; US 4391732 1983 HCAPLUS
(18) Mattson; Am J of Clinical Nutrition 1982, V35, P697 HCAPLUS
(19) Miettinen; US 5502045 1996 HCAPLUS
(20) Mitchell; US 4588717 1986 HCAPLUS
(21) Mitchell; US 4705875 1987 HCAPLUS
(22) Moreau; US 5843499 1998 HCAPLUS
(23) Powrie; Food Chemistery P833
(24) See; US 5747464 1998 HCAPLUS
(25) Straub; US 5244887 1993 HCAPLUS
(26) Thakkar; US 3881005 1975 HCAPLUS
(27) Vankanen; Clinica Chimica Acta 1992, V205, P97
(28) Watt; Composition of Foods USDA Agriculture Handbook 1975, 8, P22
(29) Webb; Byproducts from Milk 2nd edition 1970, P333
(30) Winton; The Structure and Composition of Foods 1937, VIII, P175
IT **57-88-5, Cholesterol,** biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(blood; **hypocholesteremic** phytosterol protein complex)
RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **108515-19-1**
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**hypocholesteremic** phytosterol protein complex)
RN 108515-19-1 HCAPLUS
CN Stigmastan-3-ol, (9Z)-9-octadecenoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

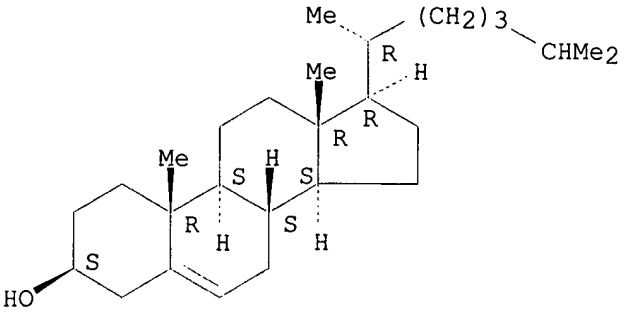


L63 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:367057 HCAPLUS
DN 133:17688
TI Preperation of **phytosterol** and/or **phytostanol** derivatives for redn. of serum **cholesterol** and triglycerides
IN Burdick, David Carl; Moine, Gerard; Raederstorff, Daniel; Weber, Peter
PA F. Hoffmann-La Roche A.-G., Switz.
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C07J009-00
ICS A23L001-30; A23D009-013
CC 32-6 (Steroids)
Section cross-reference(s): 1, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1004594	A1	20000531	EP 1999-122978	19991119 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000159792	A2	20000613	JP 1999-330770	19991122 <--
	NO 9905784	A	20000529	NO 1999-5784	19991125 <--
	AU 9960655	A1	20000601	AU 1999-60655	19991125 <--
	BR 9905398	A	20000808	BR 1999-5398	19991125 <--

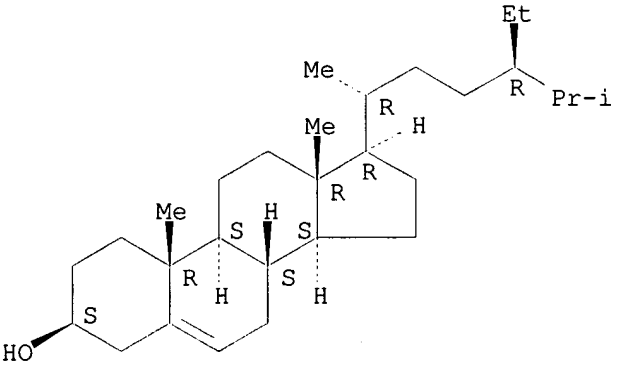
CN 1256277 A 20000614 CN 1999-124382 19991126 <--
PRAI EP 1998-122412 A 19981126 <--
EP 1999-119337 A 19990929
AB **Phytosterol** and/or **phytostanol** esters with polyunsatd. fatty acids having from 18 to 22 carbon atoms and at least three carbon-carbon double bonds are were prepd. as agents effective in reducing both serum **cholesterol** and triglycerides. Thus, .91 g docosahexaenoic acid was treated with 1.03 g stigmasterol in presence of dimethylaminopyridine in CH2Cl2 to give 1.0 g stigmasterol docosahexaenoate as an oil.
ST **phytosterol phytostanol** ester prepn **cholesterol** triglyceride redn; stigmasterol docosahexaenoate prepn **anticholesteremic**
IT **Fatty acids, preparation**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyunsatd.; prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
IT **Anticholesteremic agents**
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
IT Sterols
RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
IT Glycerides, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
IT 272107-19-4P 272107-20-7P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
IT **57-88-5, Cholesterol,** biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
IT **83-46-5** 83-48-7, Stigmasterol 474-62-4, Campesterol **6217-54-5,** Docosahexaenoic acid **10417-94-4** 81926-94-5, Ethyl docosahexaenoate 86227-47-6, Ethyl eicosapentaenoate
RL: RCT (Reactant)
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
RE.CNT 5
RE
(1) Eugster, C; US 5593691 A 1997 HCAPLUS
(2) Forbes Medi Tech Inc; WO 0004887 A 2000 HCAPLUS
(3) Mitchell, D; US 4588717 A 1986 HCAPLUS
(4) Raision Tehtaat Oy Ab; WO 9806405 A 1998 HCAPLUS
(5) Shimada, Y; JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY 1999, V76(6), P713 HCAPLUS
IT **57-88-5, Cholesterol,** biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



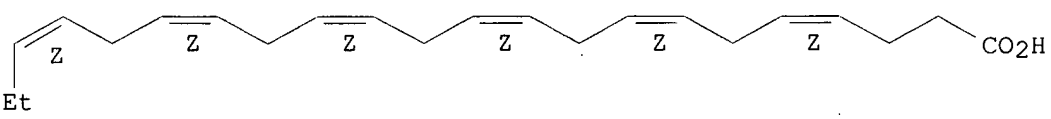
IT **83-46-5 6217-54-5**, Docosahexaenoic acid
10417-94-4
RL: RCT (Reactant)
(prepn. of **phytosterol** and/or **phytostanol** derivs. for redn. of serum **cholesterol** and triglycerides)
RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



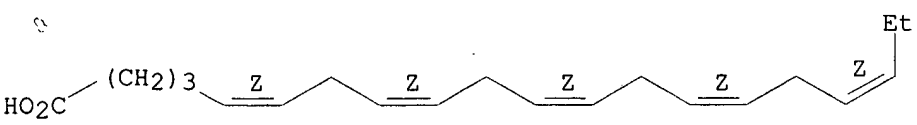
RN 6217-54-5 HCAPLUS
CN 4,7,10,13,16,19-Docosahexaenoic acid, (4Z,7Z,10Z,13Z,16Z,19Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 10417-94-4 HCAPLUS
CN 5,8,11,14,17-Eicosapentaenoic acid, (5Z,8Z,11Z,14Z,17Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L63 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 2000:113094 HCAPLUS
DN 132:156858
TI Oil and fat composition containing **phytosterol**
IN Goto, Naohiro; Nishide, Tsutomu; Tanaka, Yukitaka; Yasukawa, Takuji
PA Kao Corporation, Japan
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-56
ICS A61K031-235
NCL 514182000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6025348	A	20000215	US 1998-69754	19980430 <--

AB An oil/fat compn. is provided which lowers the blood **cholesterol** level of a person having a high **cholesterol** level when used in daily life similarly to ordinary fats and is usable without posing any problem concerning appearance, flavor, heat cooking, etc. as compared with generally edible fats, wherein the oil/fat compn. contains a **phytosterol** contained in an oil/fat contg. one or more polyhydric alc./fatty acid esters each having a degree of esterification of 2 or higher and contg. at least one hydroxyl group remaining unesterified. Twenty grams of a com. lipase prepn. was mixed with 100 g of fatty acids obtained by decompg. rapeseed oil and 15 g of glycerol. The mixt. was reacted at 45.degree. for 6 h while the inside of the system was kept at a pressure of 5 mmHg abs. The lipase prepn. was sepd. from the resultant reaction mixt. by filtration, and unreacted fatty acids and monoacylglycerols were sepd. by mol. distn. to give 72 g of purified diacylglycerols. The above diacylglycerols was added to purified rapeseed oil and **phytosterol** to obtain a compn. contg. 4.7% **phytosterol**. The compn. was ingested as cooking oils in meal in an amt. of 10 g/day by subjects having high blood **cholesterol** levels. There was a significant decrease in the blood **cholesterol** level after 28 day of ingestion.

ST oil fat **phytosterol antihypercholesterolemic**

IT **Fatty acids, biological studies**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(esters; oil and fat compn. contg. **phytosterol**)

IT **Anticholesteremic agents**
(oil and fat compn. contg. **phytosterol**)

IT Fats and Glyceridic oils, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oil and fat compn. contg. **phytosterol**)

IT Diglycerides
Glycosides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oil and fat compn. contg. **phytosterol**)

IT **Sterols**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**phyto-**; oil and fat compn. contg. **phytosterol**)

IT Alcohols, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyhydric; oil and fat compn. contg. **phytosterol**)

IT **57-88-5, Cholesterol**, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lowering of; oil and fat compn. contg. **phytosterol**)

IT 56-81-5, 1,2,3-Propanetriol, reactions **57-10-3**, Hexadecanoic

acid, reactions **57-11-4**, Octadecanoic acid, reactions **60-33-3**, Linoleic acid, reactions **112-80-1**, 9-Octadecenoic acid (9Z)-, reactions **463-40-1**, Linolenic acid 59113-36-9, Diglycerol 258283-94-2
RL: RCT (Reactant)
(oil and fat compn. contg. **phytosterol**)

IT 502-52-3P, Glycerol 1,3-dipalmitate 504-40-5P, Glyceryl 1,3-distearate 1406-18-4P, Vitamin e 2465-32-9P, Glycerol 1,3-dioleate 15818-46-9P, Glyceryl 1,3-dilinoleate 63119-59-5P, Diglycerol distearate 67965-56-4P, Diglycerol dioleate 258283-95-3P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(oil and fat compn. contg. **phytosterol**)

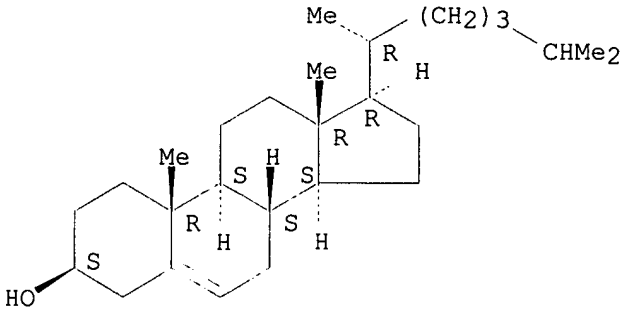
IT 57-87-4, Ergosterol **83-45-4**, **.beta.-Sitostanol** **83-46-5**, **.beta.-Sitosterol** 83-48-7, Stigmasterol 474-60-2, Campestanol 474-62-4, Campesterol 11040-28-1 19043-95-9 138126-65-5, Stigmastanol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oil and fat compn. contg. **phytosterol**)

RE.CNT 36
RE
(1) Anon; JP 5614087 1981
(2) Anon; JP 57206336 1982
(3) Anon; JP 5726732 1982
(4) Anon; JP 5739736 1982
(5) Anon; EP 0191217 1986 HCAPLUS
(6) Anon; JP 6115647 1986
(7) Anon; JP 133567 1987
(8) Anon; JP 62148424 1987 HCAPLUS
(9) Anon; EP 289636 1988 HCAPLUS
(10) Anon; JP 01174384 1989 HCAPLUS
(11) Anon; EP 0307154 1989 HCAPLUS
(12) Anon; JP 02190146 1990 HCAPLUS
(13) Anon; JP 02295490 1990 HCAPLUS
(14) Anon; EP 0426155 1991
(15) Anon; EP 0378893 1992 HCAPLUS
(16) Anon; EP 495510 1992 HCAPLUS
(17) Anon; JP 05095792 1993 HCAPLUS
(18) Anon; JP 06506909 1994 HCAPLUS
(19) Anon; JP 659164 1994
(20) Anon; JP 665311 1994
(21) Anon; EP 0307154 B2 1996 HCAPLUS
(22) Anon; WO 9623425 1996 HCAPLUS
(23) Anon; WO 9638047 1996 HCAPLUS
(24) Anon; WO 9742830 1997 HCAPLUS
(25) Anon; EP 0836805 1998 HCAPLUS
(26) Anon; JP 10179086 1998 HCAPLUS
(27) Anon; JP 1075898 1998
(28) Anon; JP 1085576 1998
(29) Anon; EP 839458 1998 HCAPLUS
(30) Anon; WO 9801461 1998 HCAPLUS
(31) Anon; WO 9806405 1998 HCAPLUS
(32) Anon; WO 9819556 1998 HCAPLUS
(33) Castner; US 3862197 1975 HCAPLUS
(34) Moreau; US 5843499 1998 HCAPLUS
(35) Pelleter, X; Ann Nutr Metab 1995, V39, P291
(36) Yasukawa; US 4976984 1990 HCAPLUS

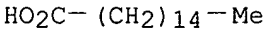
IT **57-88-5**, **Cholesterol**, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lowering of; oil and fat compn. contg. **phytosterol**)

RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

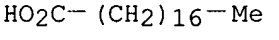
Absolute stereochemistry.



IT **57-10-3**, Hexadecanoic acid, reactions **57-11-4**, Octadecanoic acid, reactions **60-33-3**, Linoleic acid, reactions **112-80-1**, 9-Octadecenoic acid (9Z)-, reactions **463-40-1**, Linolenic acid
RL: RCT (Reactant)
(oil and fat compn. contg. **phytosterol**)
RN 57-10-3 HCAPLUS
CN Hexadecanoic acid (9CI) (CA INDEX NAME)

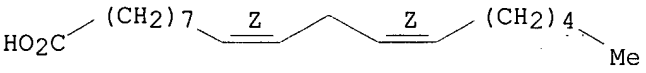


RN 57-11-4 HCAPLUS
CN Octadecanoic acid (9CI) (CA INDEX NAME)



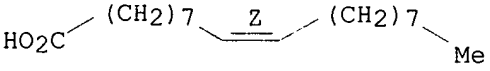
RN 60-33-3 HCAPLUS
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



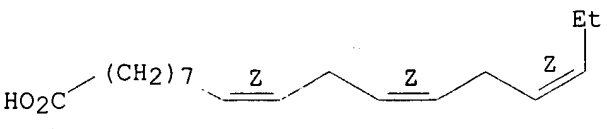
RN 112-80-1 HCAPLUS
CN 9-Octadecenoic acid (9Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 463-40-1 HCAPLUS
CN 9,12,15-Octadecatrienoic acid, (9Z,12Z,15Z)- (9CI) (CA INDEX NAME)

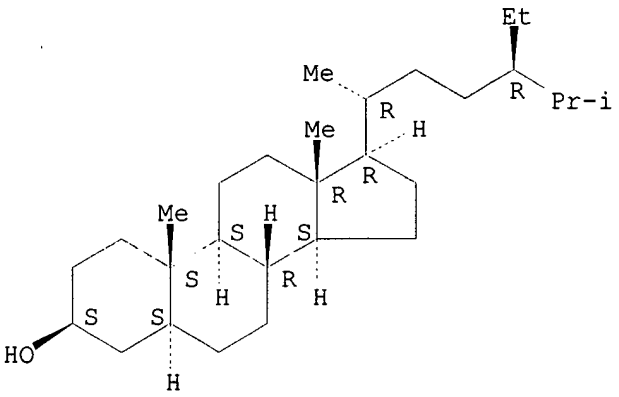
Double bond geometry as shown.



IT **83-45-4**, **.beta.-Sitostanol** **83-46-5**, **.beta.-Sitosterol**

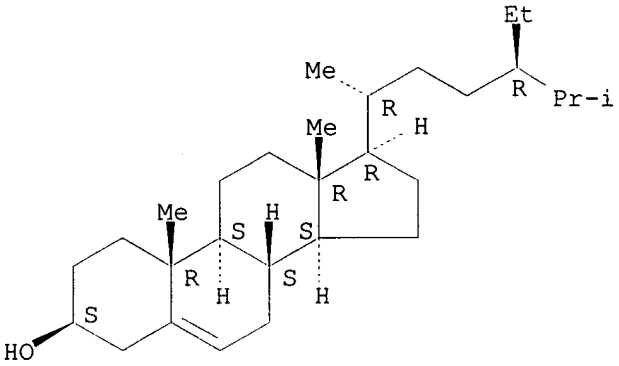
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oil and fat compn. contg. **phytosterol**)
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:722880 HCAPLUS
DN 131:327563
TI **Cholesterol**-lowering composition
IN Sjoberg, Kjell
PA Triple Crown AB, Swed.
SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K009-14
ICS A61K031-575
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 17
FAN.CNT 1

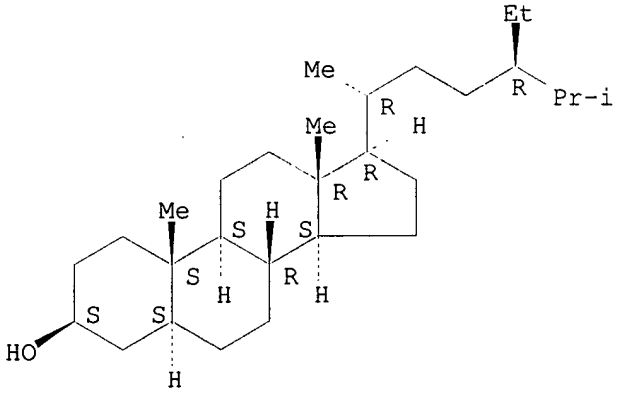
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9956729	A1	19991111	WO 1999-SE721	19990430 <--
W: AU, CA, JP, NO, NZ, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
SE 9801536	A	19991031	SE 1998-1536	19980430 <--

SE 512958 C2 20000612
AU 9943035 A1 19991123 AU 1999-43035 19990430 <--
EP 1009385 A2 20000621 EP 1999-948541 19990430 <--
R: AT, BE, CH, DE, DK, FR, GB, LI, NL, SE, IE, FI
PRAI SE 1998-1536 A 19980430 <--
WO 1999-SE721 W 19990430
AB The present invention concerns a compn. contg. a **cholesterol**-lowering component such as .**beta.-sitosterol** and/or .**beta.-sitostanol** in a monomol., low assocd. or "cluster" form, where a melt and/or soln. of the said components are distributed, immobilized and stabilized in a matrix; food contg. such a compn. and a method of prepg. this compn. The compn. can be made into e.g. capsules or tablets.
ST **anticholesteremic** sitosterol sitostanol capsule tablet
IT Drug delivery systems
(capsules; **cholesterol**-lowering compn.)
IT **Anticholesteremic agents**
Bread
Butter
Butter substitutes
Food
Margarine
Soups
(**cholesterol**-lowering compn.)
IT Alcohols, biological studies
Caseins, biological studies
Diglycerides
Fatty acids, biological studies
Gelatins, biological studies
Glycerides, biological studies
Lecithins
Monoglycerides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**cholesterol**-lowering compn.)
IT Drug delivery systems
(foams; **cholesterol**-lowering compn.)
IT Monoglycerides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lard; **cholesterol**-lowering compn.)
IT Potato (Solanum tuberosum)
(mashed; **cholesterol**-lowering compn.)
IT Chocolate
(mass; **cholesterol**-lowering compn.)
IT Drug delivery systems
(tablets; **cholesterol**-lowering compn.)
IT Milk preparations
(yogurt; **cholesterol**-lowering compn.)
IT **57-11-4**, Octadecanoic acid, biological studies **83-45-4**, .**beta.-Sitostanol 83-46-5**, .**beta.-Sitosterol** 9000-69-5, Pectin 9002-18-0, Agar 9004-32-4 9005-25-8, Starch, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**cholesterol**-lowering compn.)
RE.CNT 4
RE
(1) Harmsen, H; DE 4038385 A1 1992 HCAPLUS
(2) Nisshin Oil Mills Ltd; JP 62126966 A
(3) Roecar Holdings (Netherlands Antilles) NV; EP 0357967 A1 1990 HCAPLUS
(4) Roelof Wilke Liebenberg; GB 1365661 A 1974 HCAPLUS
IT **57-11-4**, Octadecanoic acid, biological studies **83-45-4**, .**beta.-Sitostanol 83-46-5**, .**beta.-Sitosterol**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**cholesterol**-lowering compn.)
RN 57-11-4 HCAPLUS
CN Octadecanoic acid (9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_{16}-Me$

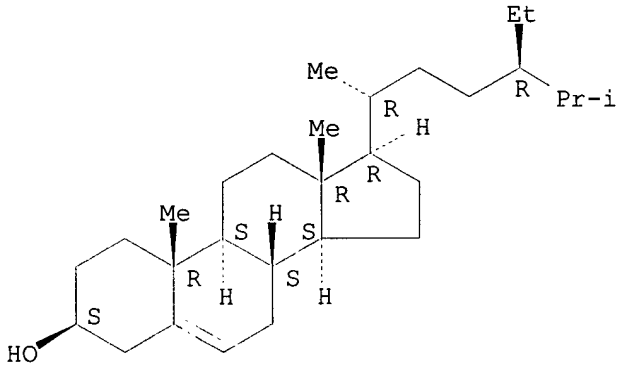
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:404806 HCAPLUS
DN 131:49483
TI Sterol esters as food additives
IN Milstein, Norman; Biermann, Manfred; Leidl, Peter; Von Kreis, Rainer
PA Henkel Corporation, USA
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A23D007-00
ICS A61K035-78
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9930569	A1	19990624	WO 1998-US26212	19981215 <--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	AU 9918139	A1	19990705	AU 1999-18139	19981215	<--
	BR 9813569	A	20001010	BR 1998-13569	19981215	<--
	EP 1045641	A1	20001025	EP 1998-963027	19981215	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
	FI 2000001412	A	20000614	FI 2000-1412	20000614	<--
	NO 2000003053	A	20000614	NO 2000-3053	20000614	<--
PRAI	US 1997-69790	P	19971216 <--			
	US 1998-72434	A	19980504 <--			
	US 1998-83584	A	19980521 <--			
	WO 1998-US26212	W	19981215 <--			

OS MARPAT 131:49483

AB A food additive useful for lowering serum **cholesterol** in humans contains a sterol or stanol ester of a fatty acid or a dicarboxylic acid ester of a sterol or stanol made by reacting a sterol, stanol and a carboxylic acid in the presence of an effective amt. of a catalyst selected from the group consisting of calcium oxide, calcium hydroxide, a calcium salt of a carboxylic acid, magnesium hydroxide and combinations thereof described herein.

ST **cholesterol** lowering sterol stanol ester; sterol fatty acid ester **cholesterol** lowering; stanol fatty acid ester **cholesterol** lowering; fatty acid sterol ester **cholesterol** lowering; **anticholesteremic** sterol stanol ester wax

IT Pine (Pinus maritima)
(bark; sterol esters as **cholesterol**-lowering food additives)

IT Carboxylic acids, uses
RL: CAT (Catalyst use); USES (Uses)
(calcium salts; sterol esters as **cholesterol**-lowering food additives)

IT Sterols
RL: FFD (Food or feed use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(esters; sterol esters as **cholesterol**-lowering food additives)

IT **Fatty acids, reactions**
RL: RCT (Reactant)
(long-chain; sterol esters as **cholesterol**-lowering food additives)

IT Fats and Glyceridic oils, reactions
RL: RCT (Reactant)
(sesame; sterol esters as **cholesterol**-lowering food additives)

IT Steroids, reactions
RL: RCT (Reactant)
(soya hydroxy, ethoxylated, Generol 122N; sterol esters as **cholesterol**-lowering food additives)

IT Steroids, reactions
RL: RCT (Reactant)
(soya hydroxy, ethoxylated, hydrogenated; sterol esters as **cholesterol**-lowering food additives)

IT **Anticholesteremic agents**
Antioxidants
Bark
Food additives
(sterol esters as **cholesterol**-lowering food additives)

IT Waxes
RL: FFD (Food or feed use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(sterol esters as **cholesterol**-lowering food additives)

IT Canola oil
Coconut oil
Corn oil
Linseed oil
Olive oil
Palm kernel oil
Palm oil
Rape oil
Safflower oil
Sunflower oil
Tallow
RL: RCT (Reactant)
(sterol esters as **cholesterol**-lowering food additives)

IT **57-88-5, Cholesterol**, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(sterol esters as **cholesterol**-lowering food additives)

IT 1305-62-0, Calcium hydroxide, uses 1305-78-8, Calcium oxide, uses 1309-42-8, Magnesium hydroxide
RL: CAT (Catalyst use); USES (Uses)
(sterol esters as **cholesterol**-lowering food additives)

IT 50-81-7, L-Ascorbic acid, biological studies 1406-18-4, Vitamin E 7235-40-7, .beta.-Carotene
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sterol esters as **cholesterol**-lowering food additives)

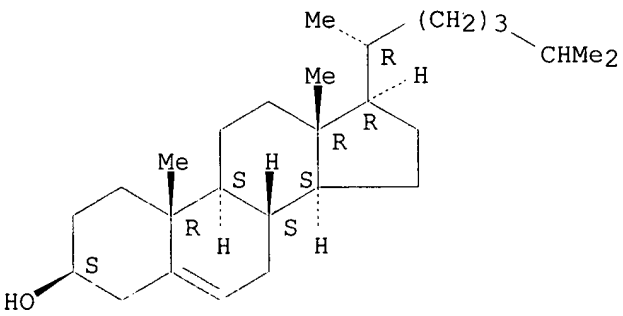
IT **83-45-4, .beta.-Sitostanol 83-46-5, .beta.-Sitosterol** 123-99-9, Nonanedioic acid, reactions 505-52-2, Brassylic acid 693-23-2, Dodecanedioic acid
RL: RCT (Reactant)
(sterol esters as **cholesterol**-lowering food additives)

RE.CNT 4
RE
(1) Berliner; US 5883087 A 1999 HCAPLUS
(2) Eugster; US 5270041 A 1993 HCAPLUS
(3) Imai; US 5514398 A 1996 HCAPLUS
(4) Miettinen, T; The new England Journal of Medicine 1995, V333(20), P1308 HCAPLUS

IT **57-88-5, Cholesterol**, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(sterol esters as **cholesterol**-lowering food additives)

RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

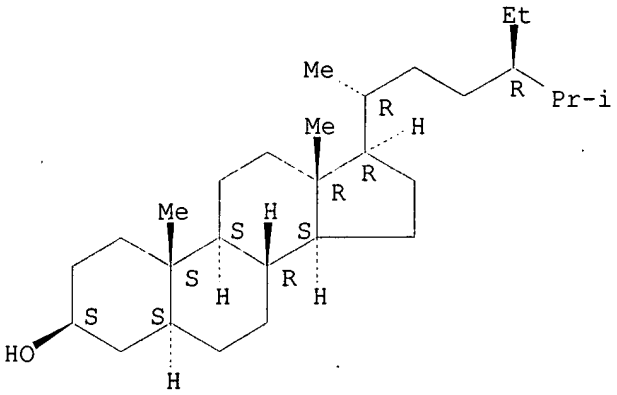
Absolute stereochemistry.



IT **83-45-4, .beta.-Sitostanol 83-46-5, .beta.-Sitosterol**
RL: RCT (Reactant)
(sterol esters as **cholesterol**-lowering food additives)

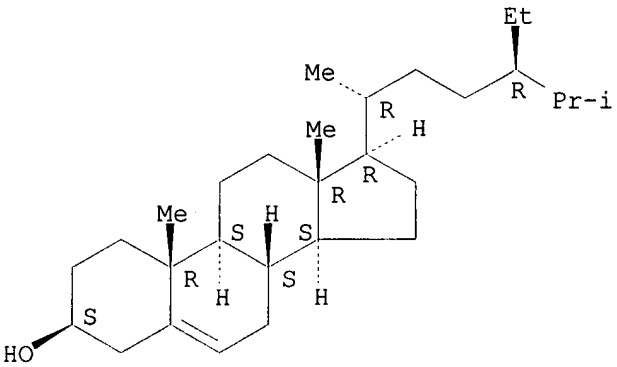
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:344854 HCAPLUS
DN 130:347399
TI Use of mixtures containing **phytostenols** for producing **hypocholesteremic** preparations
IN **Fabry, Bernd**
PA Henkel Kommanditgesellschaft auf Aktien, Germany
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM A61K031-575
CC 1-4 (Pharmacology)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9925362	A1	19990527	WO 1998-EP7059	19981105 <--
W: AU, BG, BR, BY, CA, CN, CZ, HU, ID, IS, JP, KR, LT, LV, MX, NO, NZ, PL, RO, RU, SI, SK, TR, UA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19750453	A1	19990527	DE 1997-19750453	19971114 <--
AU 9915603	A1	19990607	AU 1999-15603	19981105 <--
AU 737638	B2	20010823		
EP 1028733	A1	20000823	EP 1998-959848	19981105 <--
R: DE, ES, FR, GB, IT, NL				

PRAI DE 1997-19750453 A 19971114 <--
WO 1998-EP7059 W 19981105 <--

OS MARPAT 130:347399

AB Mixts. of active agents contg. (a) **phytostenols** and/or **phytostenol** esters and (b) **conjugated fatty acids** or their glycerides are used to produce **hypocholesteremic** prepns. These mixts. have a synergistic effect in reducing the **cholesterol** content of serum. When encapsulated in gelatin, the prepns. can be administered orally in high doses without any problems; they may also be incorporated into food products. Thus, the contents of a 1.5-g capsule, contg. 5 wt.% .beta.-sitostanyl laurate, 5 wt.% **conjugated** linoleic acid, and radiolabeled **cholesterol**, were administered to fasting rats by gavage. The radioactivity level in the blood 48 h later was 12% of that in rats fed labeled **cholesterol** alone, and was also markedly lower than that in rats given either the **phytostanol** or the **fatty acid** alone.

ST **hypocholesteremic phytostenol** unsatd **fatty acid**; synergistic **hypocholesteremic phytostenol fatty acid**

IT **Unsaturated fatty acids**
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(diunsatd., with **conjugated** double bonds; use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

IT **Sterol** esters
Sterols
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(from plants; use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

IT Glycerides, biological studies
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyunsatd. **fatty acid**-contg., with **conjugated** double bonds; use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

IT **Anticholesteremic agents**
Butter
Capsules (drug delivery systems)
Cocoa products
Dietary food
Food
Margarine
Mayonnaise
Salad dressings
Sausage
Synergistic drug interactions
(use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

IT **Polyunsaturated fatty acids**
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with **conjugated** double bonds; use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

IT **Fatty acid esters**
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with **phytostenols**; use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

IT **83-45-4**, **.beta.-Sitostanol** **83-45-4D**, **.beta.-Sitostanol**, esters **83-46-5** **83-46-5D**, esters **1839-11-8D**, 9,11-Octadecadienoic acid,

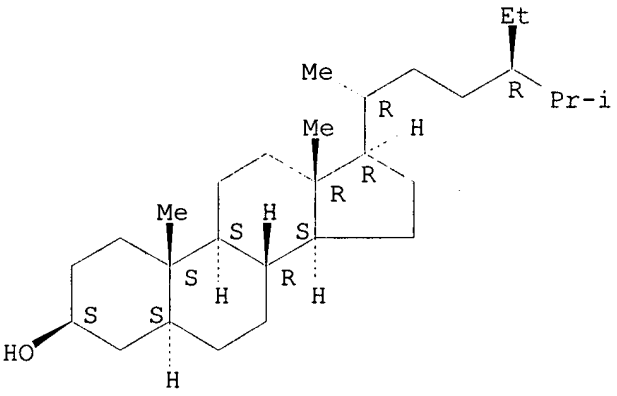
esters with **phytostenols 41005-65-6**
109033-78-5
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

RE.CNT 7
RE
(1) Funes; 1980, 5, HCAPLUS
(2) Funes, C; AN ASOC QUIM ARGENT 1978, V66(5), P239
(3) Hasegawa; Hypocholesteraemic Effect of Linoleic Acid and Phytosterol 1984, 25, HCAPLUS
(4) Hasegawa; JOSHI EIYO DAIGAKU KIYO 1983, V14, P165 HCAPLUS
(5) Kosbab, J; WO 9833494 A 1998 HCAPLUS
(6) Nutricor Inc; WO 9803084 A 1998
(7) Procter & Gamble; DE 2408067 A 1974 HCAPLUS

IT **83-45-4, .beta.-Sitostanol 83-45-4D, .beta.-Sitostanol**, esters **83-46-5 83-46-5D**, esters **1839-11-8D**, 9,11-Octadecadienoic acid, esters with **phytostenols 41005-65-6 109033-78-5**
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of mixts. contg. **phytostenols** for producing **hypocholesteremic** prepns.)

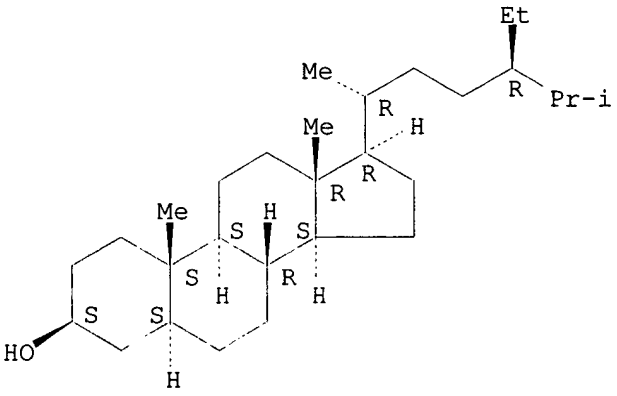
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



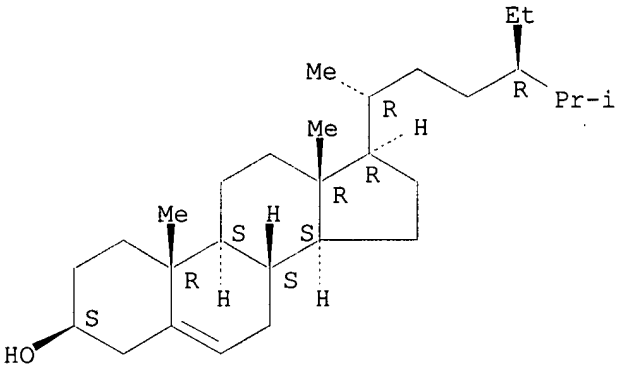
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



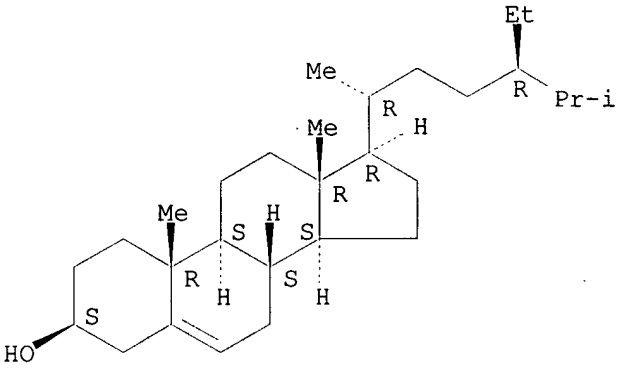
RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

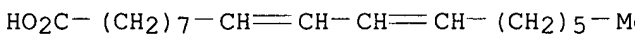


RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

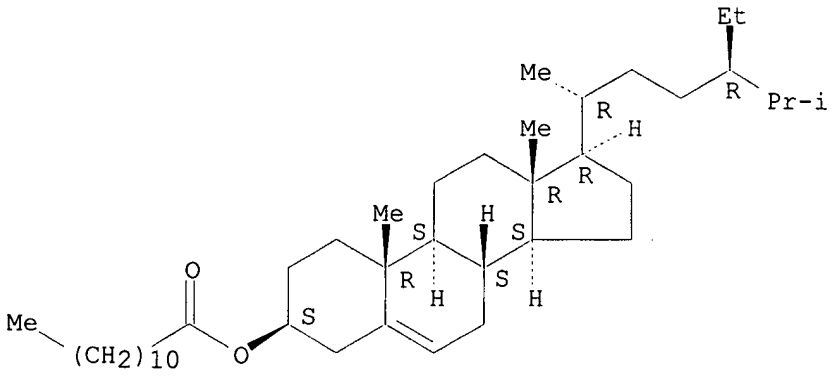


RN 1839-11-8 HCAPLUS
CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)



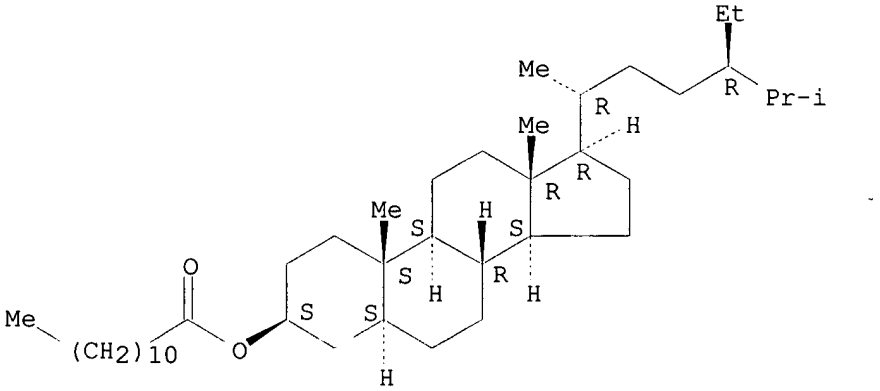
RN 41005-65-6 HCAPLUS
CN Stigmast-5-en-3-ol, dodecanoate, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 109033-78-5 HCAPLUS
CN Stigmastan-3-ol, dodecanoate, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:771359 HCAPLUS
DN 130:25230
TI Use of selected **phytosterol** esters for preparation of **hypocholesterolemic** agents
IN **Fabry, Bernd**
PA Henkel K.-G.a.A., Germany
SO Ger., 6 pp.
CODEN: GWXXAW
DT Patent
LA German
IC ICM C07J009-00
ICS A61K031-575; A61K031-70; A61K031-73
ICA A23L001-03; A23L001-314; A23D009-007; A23G001-00
CC 32-7 (Steroids)
Section cross-reference(s): 30, 33
FAN.CNT 1

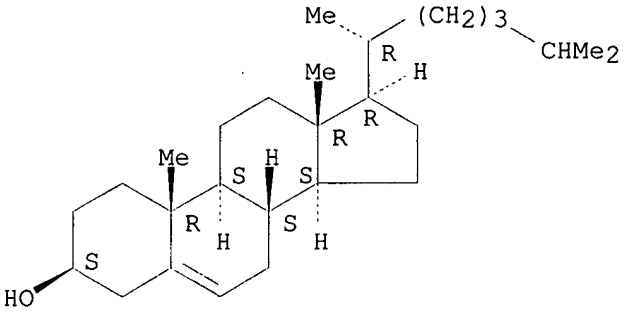
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 19750422	C1	19981126	DE 1997-19750422	19971114 <--
WO 9925361	A1	19990527	WO 1998-EP7057	19981105 <--
W: AU, BG, BR, BY, CA, CN, CZ, HU, ID, IS, JP, KR, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, TR, UA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9915602	A1	19990607	AU 1999-15602	19981105 <--
AU 737048	B2	20010809		
EP 1028732	A1	20000823	EP 1998-959847	19981105 <--

R: DE, ES, FR, GB, IT, NL
PRAI DE 1997-19750422 A 19971114 <--
WO 1998-EP7057 W 19981105 <--
AB Use of **phytosterol** esters of unsatd. **conjugated fatty acids** for prepn. of **hypocholesterolemic** agents is described. Thus, in a gelatin capsule is added a mixt. of different **.beta.-sitosterol** esters (5%), radioactively-labeled **cholesterol** (0.5%) and if necessary vitamin E. The blood of animals receiving these capsules were tested for radioactivity at 3, 6, 12, 24, and 48 h; after 48 h radioactivity was down to 15-21%.
ST **phytosterol** ester **hypocholesterolemic** agent prepn; sitosterol ester **hypocholesterolemic** agent prepn; **sitostanol** ester **hypocholesterolemic** agent prepn
IT **Sterol** esters
RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(esters; use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT **Fatty acid esters**
RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(steroidal; use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT **Anticholesteremic agents**
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT Tocopherols
RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT DNA
RNA
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT **57-88-5D, Cholesterol**, radioactively-labeled
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT **60-33-3DP**, Linoleic acid, **phytosterol** esters **83-45-4DP, .beta.-Sitostanol, fatty acid** esters **83-46-5DP, .beta.-Sitosterol, fatty acid** esters 1406-18-4P, Vitamin E **3577-13-7P, .beta.-Sitosterol** linoleate **108514-64-3P, .beta.-Sitostanol** linoleate **108515-19-1P, .beta.-Sitostanol** oleate
RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT 9012-76-4P, Chitosan **109033-78-5P, .beta.-Sitostanol** laurate
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
IT **57-88-5D, Cholesterol**, radioactively-labeled
RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)

RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

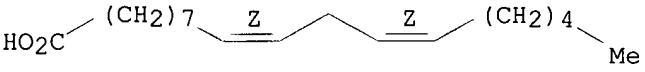
Absolute stereochemistry.



IT **60-33-3DP**, Linoleic acid, **phytosterol** esters
83-45-4DP, **.beta.-Sitostanol**, **fatty acid** esters **83-46-5DP**, **.beta.-Sitosterol**, **fatty acid** esters
3577-13-7P, **.beta.-Sitosterol** linoleate
108514-64-3P, **.beta.-Sitostanol** linoleate
108515-19-1P, **.beta.-Sitostanol** oleate
RL: BAC (Biological activity or effector, except adverse); IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)

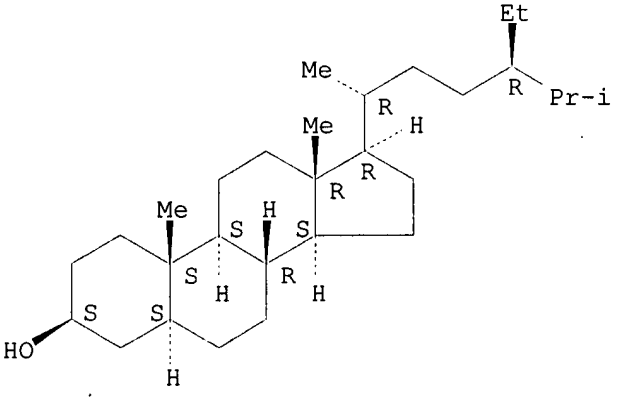
RN 60-33-3 HCAPLUS
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



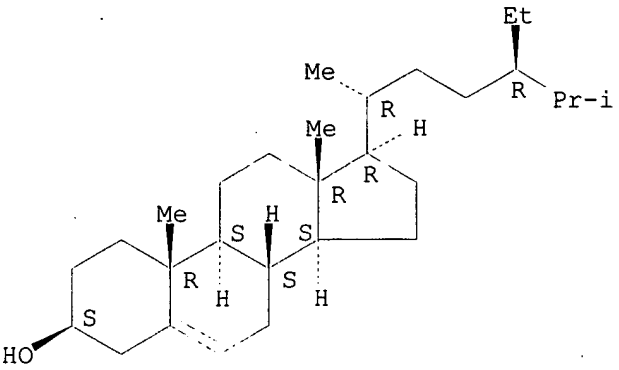
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



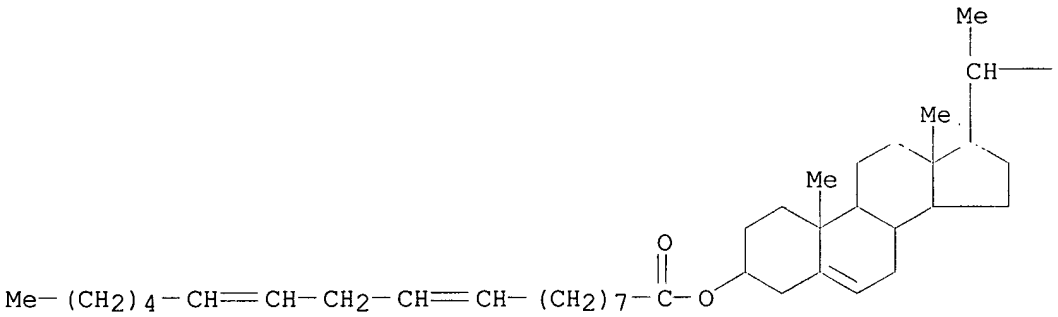
RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

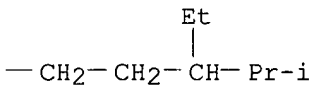


RN 3577-13-7 HCAPLUS
CN Stigmast-5-en-3-ol, (9Z,12Z)-9,12-octadecadienoate, (3.beta.)- (9CI) (CA INDEX NAME)

PAGE 1-A



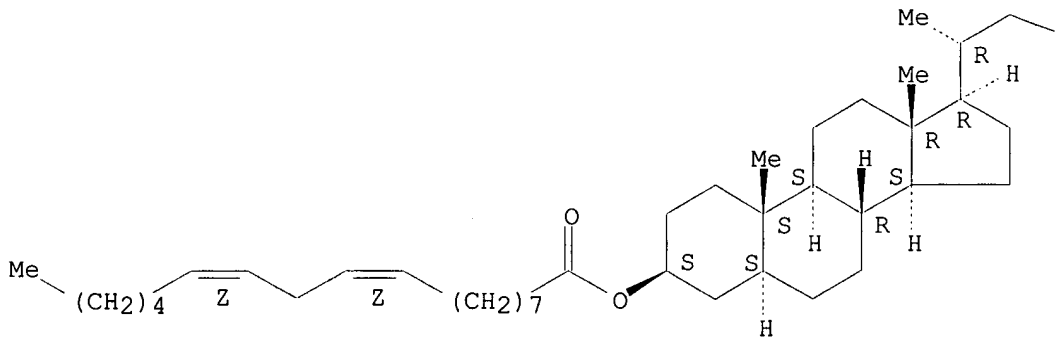
PAGE 1-B



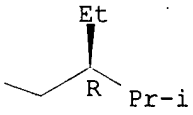
RN 108514-64-3 HCAPLUS
CN Stigmastan-3-ol, (9Z,12Z)-9,12-octadecadienoate, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

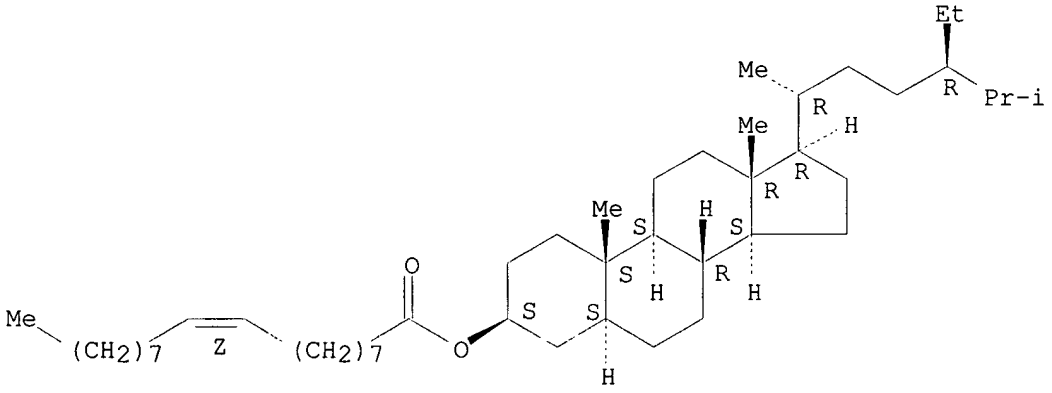


PAGE 1-B



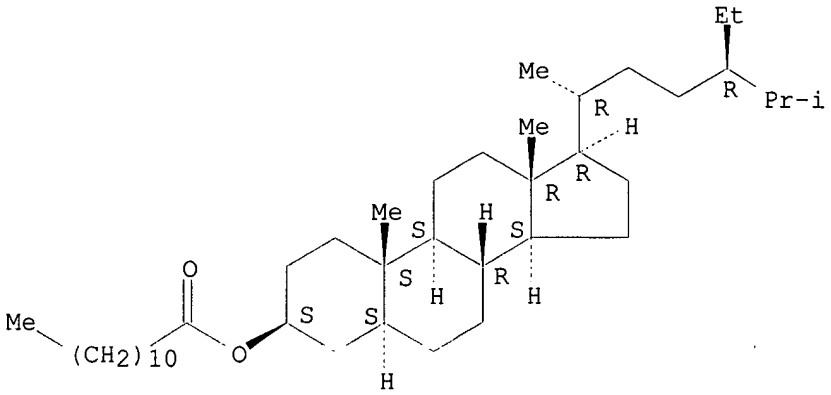
RN 108515-19-1 HCAPLUS
CN Stigmastan-3-ol, (9Z)-9-octadecenoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT **109033-78-5P, .beta.-Sitostanol** laurate
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of selected **phytosterol** esters for prepn. of **hypocholesterolemic** agents)
RN 109033-78-5 HCAPLUS
CN Stigmastan-3-ol, dodecanoate, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:385506 HCAPLUS
DN 129:36452
TI Use of mixtures of **phytostanols** and tocopherols for the production of **hypocholesteremic** agents
IN Weitkemper, Norbert; **Fabry, Bernd**
PA Henkel Kommanditgesellschaft Auf Aktien, Germany; Weitkemper, Norbert; Fabry, Bernd
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM A61K031-575
ICS A61K031-575; A61K031-355
CC 1-8 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 1

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PI	WO 9823275	A1	19980604	WO 1997-EP6447	19971119	<--
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	DE 19700796	C2	19981112			
	WO 9823277	A1	19980604	WO 1997-EP6450	19971119	<--
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	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
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	AU 713665	B2	19991209			
	AU 9855531	A1	19980622	AU 1998-55531	19971119	<--
	AU 714993	B2	20000113			
	EP 941097	A1	19990915	EP 1997-950201	19971119	<--
	R: BE, DE, DK, ES, FR, GB, IT, NL, SE, FI					
	EP 952837	A1	19991103	EP 1997-951916	19971119	<--
	R: BE, DE, DK, ES, FR, GB, IT, NL, SE, FI					
	JP 2001504505	T2	20010403	JP 1998-524239	19971119	<--
	JP 2001508046	T2	20010619	JP 1998-524240	19971119	<--
	NO 9902562	A	19990527	NO 1999-2562	19990527	<--
	NO 9902564	A	19990527	NO 1999-2564	19990527	<--
PRAI	DE 1996-19649286	A	19961128	<--		
	DE 1997-19700796	A	19970113	<--		
	WO 1997-EP6447	W	19971119	<--		
	WO 1997-EP6450	W	19971119	<--		

OS MARPAT 129:36452
AB Tocopherols, though themselves having little or no **hypocholesteremic** activity, potentiate the **hypocholesteremic** action of **phytostanol** esters. The effect is further potentiated by chitosan, **phytosterol** sulfates,

RNA, and DNA. If these agents are encapsulated in gelatin, they can be administered orally in high doses without problems. Thus, a gelatin capsule contg. **.beta.-sitostanol** laurate 5, vitamin E 5, and radiolabeled **cholesterol** 0.5 wt.% was administered to rats by gavage. The level of blood radioactivity 24 h later was 39% of that in control rats, compared to 51% in rats receiving **.beta.-sitostanol** laurate but not vitamin E.

ST **hypocholesteremic phytostanol** tocopherol; **sitostanol** laurate vitamin E **hypocholesteremic**

IT **Anticholesteremic agents**
Capsules (drug delivery systems)
(mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

IT DNA
RNA
Tocopherols
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

IT **Sterols**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(of plants; mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

IT Sulfates, biological studies
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**sterol**, of plants; mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

IT **Sterols**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sulfates, of plants; mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

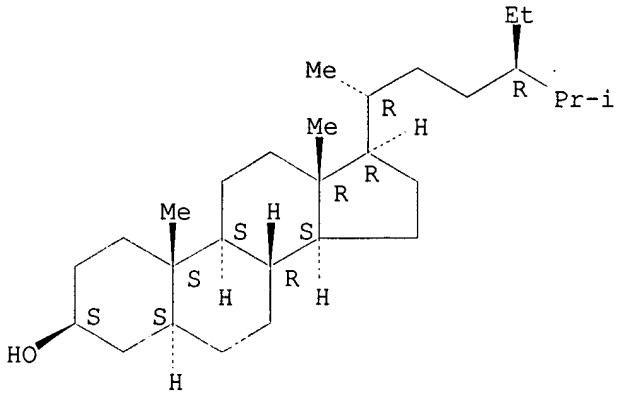
IT **Fatty acid esters**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with **sitostanol**; mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

IT 59-02-9, .alpha.-Tocopherol **83-45-4D, .beta.-Sitostanol**, esters 9012-76-4, Chitosan **109033-78-5**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

IT **83-45-4D, .beta.-Sitostanol**, esters
109033-78-5
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mixts. of **phytostanols** and tocopherols for prodn. of **hypocholesteremic** agents)

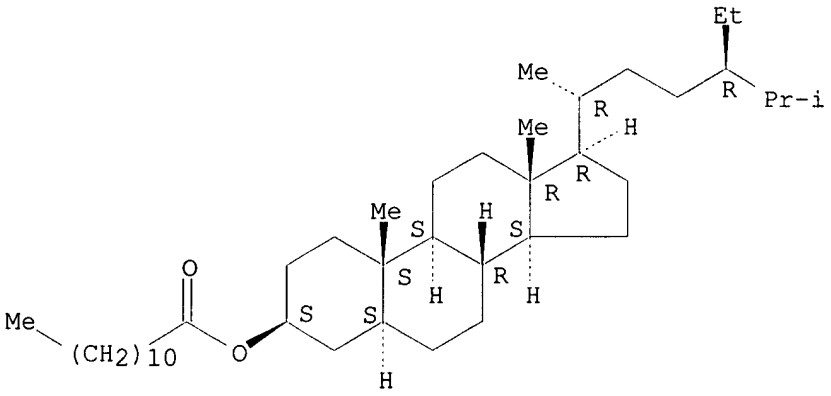
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 109033-78-5 HCAPLUS
CN Stigmastan-3-ol, dodecanoate, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:323105 HCAPLUS
DN 129:15518
TI Texturizing compositions for use in fat blends in food
IN Wester, Ingmar
PA Raisio Yhtyma Oy, Finland; Wester, Ingmar
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A23D009-013
ICS A23D007-00; A23L001-30
CC 17-9 (Food and Feed Chemistry)
Section cross-reference(s): 13, 18
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9819556	A1	19980514	WO 1997-FI669	19971103 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9748699	A1	19980529	AU 1997-48699	19971103 <--

AU 736020 B2 20010726
BR 9712869 A 19991207 BR 1997-12869 19971103 <--
CN 1239407 A 19991222 CN 1997-180199 19971103 <--
EP 1011343 A1 20000628 EP 1997-911262 19971103 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2001503623 T2 20010321 JP 1998-520845 19971103 <--
ZA 9709903 A 19980901 ZA 1997-9903 19971104 <--
NO 9902086 A 19990705 NO 1999-2086 19990429 <--
PRAI US 1996-740845 A 19961104 <--
WO 1997-FI669 W 19971103 <--

AB Fatty acid esters, such as the unsatd. fatty acid esters of sterols and/or stanols, are used as a replacement for a substantial portion or all of the undesirable satd. and trans-unsatd. fats used as structure giving hardstocks in edible foods such as margarines, mayonnaise, cooking oils, cheeses, butter and shortening. Because of the similarity in the crystallinity and phys. properties of the esters to those of the undesirable hardstock fats, the substitution or replacement contributes favorably to the flavor, texture and other sensory properties of the foods. Only the fatty acid portion of the **phytosterol** esters defined herein as texturizing agent is digested or absorbed with the sterol part being unabsorbable, thereby resulting in a redn. in total caloric uptake. Furthermore, the **phytosterol** fatty acid esters reduce the absorption of both dietary and biliary **cholesterol** from the digestive tract, thereby lowering the blood serum **cholesterol** level, esp. the LDL-**cholesterol**.

ST fat blend **anticholesteremic phytosterol** ester

IT Sterols
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty acid esters; texturizing compns. for use in fat blends in food)

IT **Fatty acid esters**
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stanol derivs; texturizing compns. for use in fat blends in food)

IT **Anticholesteremic agents**
Butter substitutes
Flavoring materials
(texturizing compns. for use in fat blends in food)

IT Gelatins, biological studies
Monounsaturated fatty acids
Polyunsaturated fatty acids
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(texturizing compns. for use in fat blends in food)

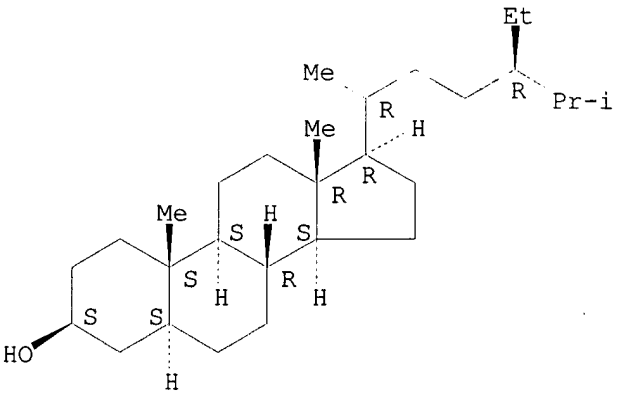
IT Coconut oil
Corn oil
Palm oil
Rape oil
Soybean oil
Sunflower oil
Vegetable oils
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(texturizing compns. for use in fat blends in food)

IT 50-21-5, Lactic acid, biological studies 77-92-9, Citric acid, biological studies 144-55-8, Sodium bicarbonate, biological studies 9005-80-5, Raftiline HP 24634-61-5, Potassium sorbate
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(texturizing compns. for use in fat blends in food)

IT **83-45-4D**, fatty acid ester derivs **83-46-5D**, fatty acid ester derivs 83-48-7D, fatty acid ester derivs 474-60-2D, fatty acid ester derivs 474-62-4D, fatty acid ester derivs
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(texturizing compns. for use in fat blends in food)

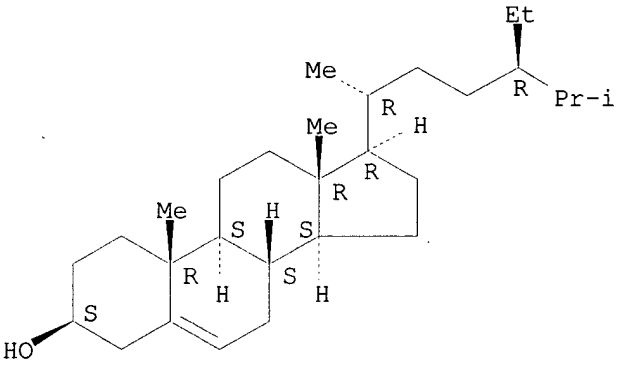
IT **83-45-4D**, fatty acid ester derivs **83-46-5D**, fatty acid ester derivs
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(texturizing compns. for use in fat blends in food)
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1998:124016 HCAPLUS
DN 128:191937
TI Stanol composition and the use thereof
IN Wester, Ingmar; Palmu, Tapio; Miettinen, Tatu; Gylling, Helena
PA Raision Tehtaat Oy AB, Finland; Wester, Ingmar; Palmu, Tapio; Miettinen, Tatu; Gylling, Helena
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-575
CC 17-14 (Food and Feed Chemistry)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9806405	A1	19980219	WO 1996-FI465	19960902 <--

W: AT, AU, AZ, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KP, KR, KZ, LK, LT, LU, LV, MD, MK,

MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TR, UA,
US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

FI	9603126	A	19980210	FI 1996-3126	19960809 <--
AU	9668230	A1	19980306	AU 1996-68230	19960902 <--
AU	734418	B2	20010614		
EP	871451	A1	19981021	EP 1996-928481	19960902 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN	1228025	A	19990908	CN 1996-180406	19960902 <--
BR	9612693	A	19991228	BR 1996-12693	19960902 <--
JP	2000513730	T2	20001017	JP 1998-509427	19960902 <--
ZA	9607616	A	19970416	ZA 1996-7616	19960910 <--
NO	9900559	A	19990205	NO 1999-559	19990205 <--
LT	4649	B	20000425	LT 1999-18	19990226 <--
LV	12307	B	19991020	LV 1999-41	19990309 <--
PRAI	FI 1996-3126	A	19960809 <--		
	WO 1996-FI465	W	19960902 <--		

AB A stanol compn. contg. in addn. to sitostanol as the main component, also a substantial amt. of at least 10 % campestanol effectively lowers serum **cholesterol** levels when incorporated in edible commodities. Upon esterification the compn. is esp. useful in edible fats and oils and in fat-contg. foods. A vegetable oil distillate (brassicasterol 2.7, campesterol 26.7, stigmasterol 18.4, sitosterol 49.1, and sitostanol 2.9 %) was hydrogenated and esterified with rapeseed oil Me ester. Margarines were produced using the above product.

ST sitostanol campestanol fatty food **anticholesterolemic**

IT Sterols
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(esters; sterol compns. incorporated in fatty food for lowering serum **cholesterol** levels)

IT Food
(fatty; sterol compns. incorporated in fatty food for lowering serum **cholesterol** levels)

IT **Fatty acids, biological studies**
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(rape-oil, Me esters, sterol esters with; sterol compns. incorporated in fatty food for lowering serum **cholesterol** levels)

IT **Anticholesteremic agents**
Margarine
(sterol compns. incorporated in fatty food for lowering serum **cholesterol** levels)

IT Sterols
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(sterol compns. incorporated in fatty food for lowering serum **cholesterol** levels)

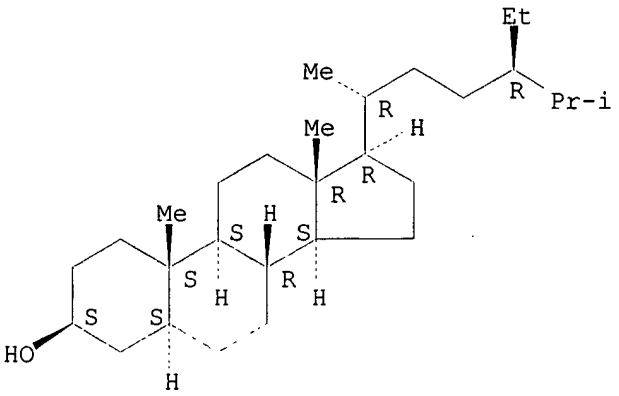
IT **83-45-4**, Sitostanol **83-46-5** 83-48-7, Stigmasterol
474-60-2, Campestanol 474-62-4, Campesterol 474-67-9, Brassicasterol
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(sterol compns. incorporated in fatty food for lowering serum **cholesterol** levels)

IT **83-45-4**, Sitostanol **83-46-5**
RL: BAC (Biological activity or effector, except adverse); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(sterol compns. incorporated in fatty food for lowering serum **cholesterol** levels)

RN 83-45-4 HCAPLUS

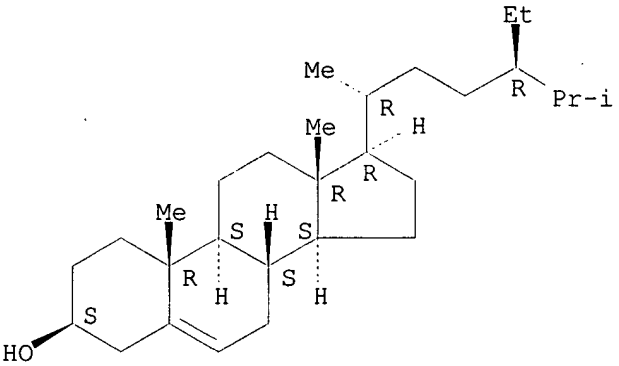
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1996:586511 HCAPLUS
DN 125:292739
TI Mucilage and lipid constituents of Balanites aegyptiaca Del. and their biological evaluation
AU Ibrahim, N.; Saeed, A.; Bashandy, S.; Omer, E.
CS Pharmaceutical Sciences, National Research Centre, Cairo, Egypt
SO Bull. Fac. Pharm. (Cairo Univ.) (**1994**), 32(3), 411-414
CODEN: BFPHA8; ISSN: 1110-0931
DT Journal
LA English
CC 1-10 (Pharmacology)
Section cross-reference(s): 11
AB Mucilage of the mesocarp as well as the lipid contents of the endocarp of Balanites aegyptiaca Del. were investigated. GLC anal. of mucilage hydrolyzate indicated the presence of arabinose, rhamnose, xylose, mannose, galactose and galacturonic acid. The unsaponifiable matter (USM) was analyzed by GLC to give 18 compds. consisting of a hydrocarbon mixt. in addn. to **cholesterol** and **.beta.-sitosterol** . GLC of the fatty acid Me esters (FAME) revealed the presence of palmitic, oleic and linoleic acids as the major fatty acids of the endocarp. Evaluation of the mucilage as oral hypoglycemic drug showed significant results, accompanied with obvious improvement in the blood **cholesterol**, triglycerides and creatinine levels of the investigated rats.
ST Balanites aegyptiaca mucilage lipid pharmacol; hypoglycemic **hypocholesteremic** Balanites aegyptiaca component; triglyceride creatinine regulation Balanites aegyptiaca component
IT **Anticholesteremics and Hypolipemics**

Antidiabetics and Hypoglycemics
Balanites aegyptiaca
(Balanites aegyptiaca mucilage and lipid constituents and biol. evaluation)

IT Pharmaceutical natural products
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Balanites aegyptiaca mucilage and lipid constituents and biol. evaluation)

IT Glycerides, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(hypotriglyceridemics; Balanites aegyptiaca mucilage and lipid constituents and biol. evaluation)

IT **57-10-3**, Hexadecanoic acid, biological studies 58-86-6, D-Xylose, biological studies 59-23-4, D-Galactose, biological studies **60-33-3**, 9,12-Octadecadienoic acid (Z,Z)-, biological studies **83-46-5**, **.beta.-Sitosterol** 111-02-4, Squalene **112-80-1**, 9-Octadecenoic acid (Z)-, biological studies 112-95-8, n-Eicosane 142-62-1, Hexanoic acid, biological studies 147-81-9, Arabinose **544-63-8**, Tetradecanoic acid, biological studies 544-76-3, n-Hexadecane 544-85-4, n-Dotriacontane 593-45-3, n-Octadecane 629-59-4, n-Tetradecane 629-62-9, n-Pentadecane 629-94-7, Heneicosane 629-97-0, n-Docosane 629-99-2, n-Pentacosane 630-01-3, n-Hexacosane 630-02-4, n-Octacosane 630-04-6, Hentriacontane 638-67-5, n-Tricosane 638-68-6, n-Triacontane 646-31-1, n-Tetracosane 685-73-4, D-Galacturonic acid 3458-28-4, D-Mannose 3615-41-6, Rhamnose
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(Balanites aegyptiaca mucilage and lipid constituents and biol. evaluation)

IT **57-88-5**, **Cholesterol**, biological studies 60-27-5, Creatinine
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(Balanites aegyptiaca mucilage and lipid constituents and biol. evaluation)

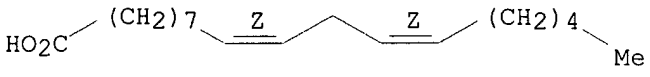
IT **57-10-3**, Hexadecanoic acid, biological studies **60-33-3**, 9,12-Octadecadienoic acid (Z,Z)-, biological studies **83-46-5**, **.beta.-Sitosterol** **112-80-1**, 9-Octadecenoic acid (Z)-, biological studies **544-63-8**, Tetradecanoic acid, biological studies
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(Balanites aegyptiaca mucilage and lipid constituents and biol. evaluation)

RN 57-10-3 HCAPLUS
CN Hexadecanoic acid (9CI) (CA INDEX NAME)

$HO_2C-(CH_2)_{14}-Me$

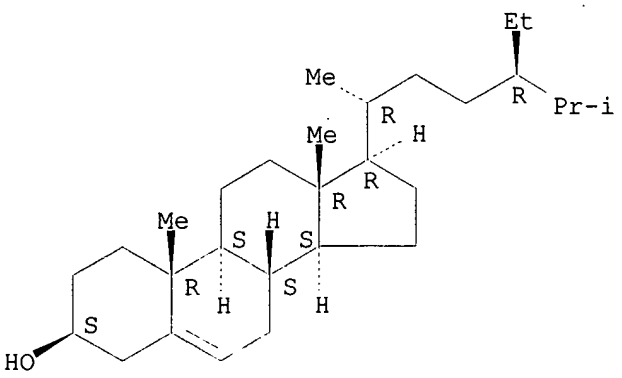
RN 60-33-3 HCAPLUS
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



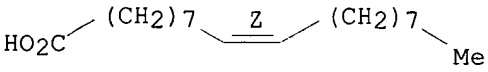
RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

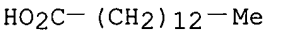


RN 112-80-1 HCAPLUS
CN 9-Octadecenoic acid (9Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

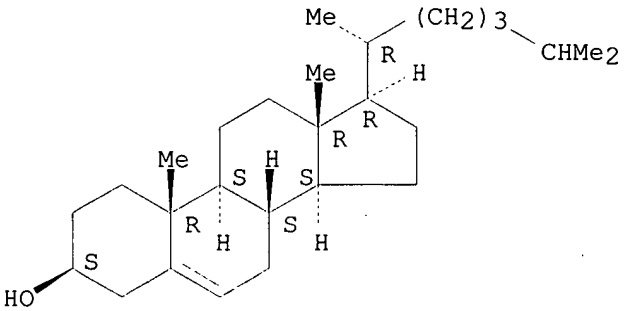


RN 544-63-8 HCAPLUS
CN Tetradecanoic acid (9CI) (CA INDEX NAME)



IT **57-88-5, Cholesterol,** biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(Balanites aegyptiaca mucilage and lipid constituents and biol. evaluation)
RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

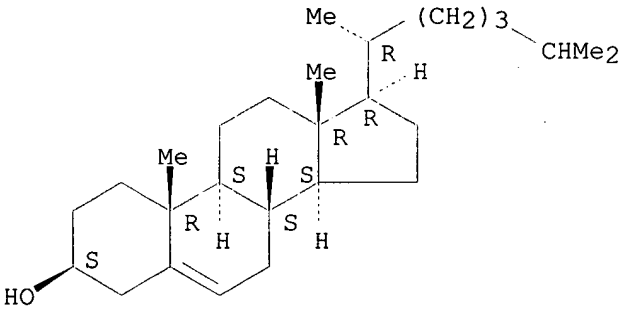
Absolute stereochemistry.



L63 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1993:32946 HCAPLUS
DN 118:32946
TI A substance (**.beta.-sitostanol** fatty acid esters) for lowering high **cholesterol** level in serum and a method for preparing the same
IN Miettinen, Tatu; Vanhanen, Hannu; Wester, Ingmar
PA Raision Margariini Oy, Finland
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2

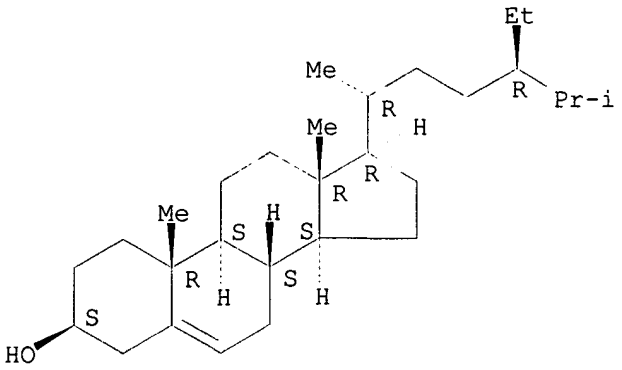
IT **Fatty acids, esters**
RL: RCT (Reactant)
(rape-oil, Me esters, transesterification of, with **.beta.-sitostanol**)
IT **Fatty acids, esters**
RL: SPN (Synthetic preparation); PREP (Preparation)
(rape-oil, esters, with **.beta.-sitostanol**, prepn. of, as **antihypercholesterolemics**)
IT **57-88-5, Cholesterol**, properties
RL: PRP (Properties)
(dietary absorption of, effect of **.beta.-sitostanol** fatty acid esters in rapeseed oil on)
IT **83-46-5, .beta.-Sitosterol** 474-62-4, Campesterol
RL: BIOL (Biological study)
(in serum, effect of dietary **.beta.-sitostanol** and **.beta.-sitostanol** fatty acid esters on)
IT **83-45-4DP, .beta.-Sitostanol**, fatty acid esters
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as **antihypercholesterolemics** and fat substitutes)
IT **83-45-4, .beta.-Sitostanol**
RL: RCT (Reactant)
(transesterification of, with fatty acid esters, and effect of, on serum plant sterol levels)
IT **57-88-5, Cholesterol**, properties
RL: PRP (Properties)
(dietary absorption of, effect of **.beta.-sitostanol** fatty acid esters in rapeseed oil on)
RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



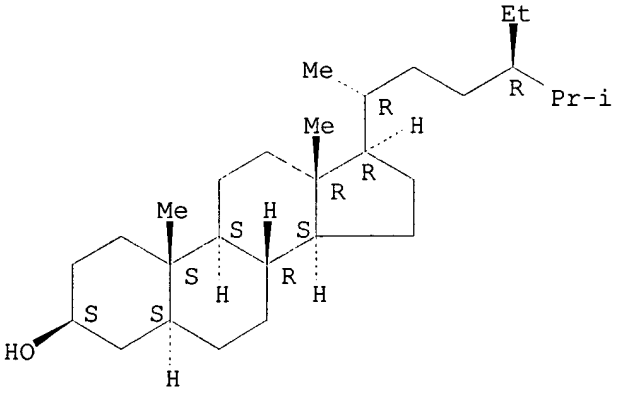
IT **83-46-5, .beta.-Sitosterol**
RL: BIOL (Biological study)
(in serum, effect of dietary **.beta.-sitostanol** and **.beta.-sitostanol** fatty acid esters on)
RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



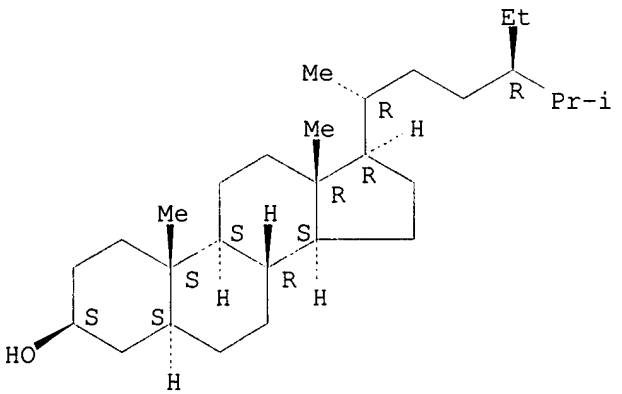
IT **83-45-4DP, .beta.-Sitostanol,** fatty acid esters
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as **antihypercholesterolemics** and fat substitutes)
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

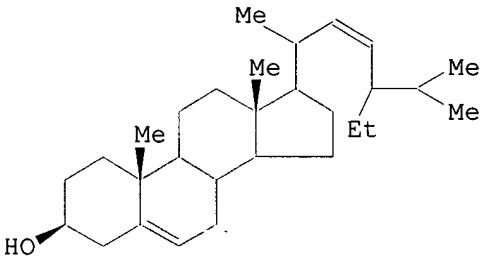


IT **83-45-4, .beta.-Sitostanol**
RL: RCT (Reactant)
(transesterification of, with fatty acid esters, and effect of, on serum plant sterol levels)
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L63 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1980:560958 HCAPLUS
DN 93:160958
TI **Hypocholesterolemic** activity of **phytosterol**. II
AU Tabata, Toshikazu; Tanaka, Mitsuo; Iio, Toshihiro
CS Showa Coll. Pharm. Sci., Tokyo, Japan
SO Yakugaku Zasshi (**1980**), 100(5), 546-52
CODEN: YKKZAJ; ISSN: 0031-6903
DT Journal
LA Japanese
CC 1-3 (Pharmacodynamics)
GI



I

AB The **hypocholesterolemic** activities of **phytosterols** and related compds. were compared in rats receiving a 3% **cholesterol** [**57-88-5**]- contg. diet. The rats were i.v. injected for 5 days with emulsions of saline-albumin contg. each sterol. The greatest effect on lowering liver **cholesterol**, triglyceride, and fatty acid levels was shown by stigmasterol (I) [83-48-7], followed by **.beta.-sitosterol** [**83-46-5**], stigmastanol [**83-45-4**], ergosterol [57-87-4] and 7-**ketocholesterol** [566-28-9]. On the other hand, I palmitate [2308-84-1] and I stearate [23838-16-6] showed considerably lower activity than I. No effect could be seen in I acetate [4651-48-3], which is not found in nature. After injections, I in liver was present mainly in a free form and the palmitate or the stearate changed partly to the free form, 20% or 25% of the injected amt., resp. However, I acetate remained unchanged after injection. The cytochrome P-450 [9035-51-2] content of hepatic microsome from **hypercholesterolemic** rats was decreased by treatment with I and similar findings were obtained in microsomes from livers of normal or phenobarbital-treated rats which had been given I. The presence of a free hydroxy group at the C-3 position in **phytosterols** is apparently necessary for the **hypocholesterolemic** activities and a double bond at the C-5 position and a side-chain at the C-17 position, may also relate to these activities.

ST **phytosterol hypocholesterolemic**; stigmasterol **hypocholesterolemic**

IT Liver, composition
(**cholesterol** of, **phytosterols** effect on)

IT **Fatty acids, biological studies**
Glycerides, biological studies
RL: BIOL (Biological study)
(of liver, **phytosterols** effect on)

IT **Anticholesteremics and Hypolipemics**
(**phytosterols** as, structure in relation to)

IT Molecular structure-biological activity relationship
(**anticholesteremic**, of **phytosterols**)

IT Steroids, biological studies
RL: BIOL (Biological study)
(hydroxy, of plants, **anticholesteremic** activity of, structure in relation to)

IT 57-87-4 **83-45-4** **83-46-5** 83-48-7 566-28-9

2308-84-1 4651-48-3 23838-16-6
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**anticholesteremic** activity of, structure in relation to)

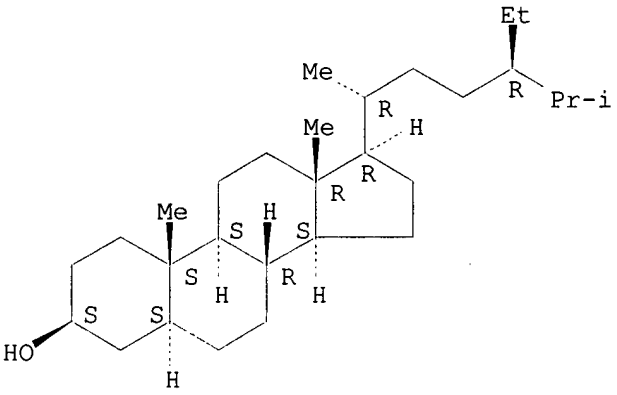
IT 9035-51-2, biological studies
RL: BIOL (Biological study)
(of liver microsomes, **phytosterols** effect on)

IT **57-88-5**, biological studies
RL: BIOL (Biological study)
(of liver, **phytosterols** effect on)

IT **83-45-4 83-46-5**
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**anticholesteremic** activity of, structure in relation to)

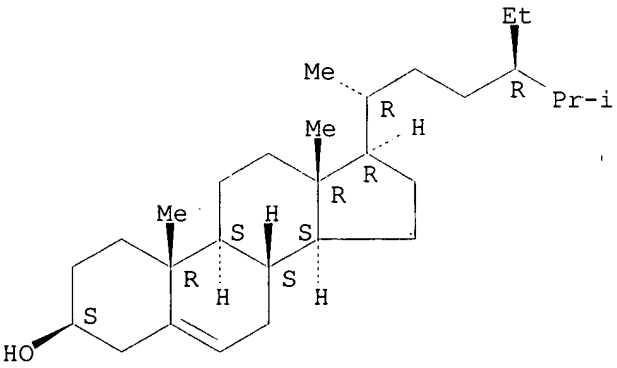
RN 83-45-4 HCAPLUS
CN Stigmastan-3-ol, (3.beta.,5.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 83-46-5 HCAPLUS
CN Stigmast-5-en-3-ol, (3.beta.)- (9CI) (CA INDEX NAME)

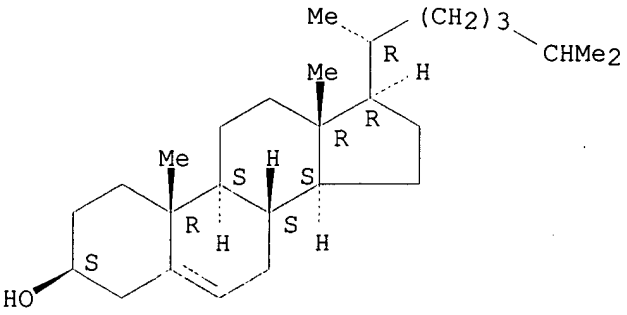
Absolute stereochemistry.



IT **57-88-5**, biological studies
RL: BIOL (Biological study)
(of liver, **phytosterols** effect on)

RN 57-88-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> fil medline
FILE 'MEDLINE' ENTERED AT 08:25:11 ON 20 NOV 2001

FILE LAST UPDATED: 19 NOV 2001 (20011119/UP). FILE COVERS 1958 TO DATE.

On April 22, 2001, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE now contains IN-PROCESS records. See HELP CONTENT for details.

MEDLINE is now updated 4 times per week. A new current-awareness alert frequency (EVERYUPDATE) is available. See HELP UPDATE for more information.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2001 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE file segment now contains data from 1958 through 1965. Enter HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the Basic Index. See HELP SFIELDS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> d all tot

L85 ANSWER 1 OF 2 MEDLINE
AN 1998292337 MEDLINE
DN **98292337** PubMed ID: **9630383**
TI Plant sterol-enriched margarines and reduction of plasma total- and LDL-**cholesterol** concentrations in **normocholesterolaemic** and mildly **hypercholesterolaemic** subjects.
AU Weststrate J A; Meijer G W
CS Unilever Nutrition Centre, Unilever Research Laboratorium, Vlaardingen, The Netherlands.
SO EUROPEAN JOURNAL OF CLINICAL NUTRITION, **(1998 May)** 52 (5) 334-43.
Journal code: EJC; 8804070. ISSN: 0954-3007.
CY ENGLAND: United Kingdom
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 199808
ED Entered STN: 19980817
Last Updated on STN: 19980817
Entered Medline: 19980804
AB OBJECTIVES: To compare effects on plasma total-, LDL-, and HDL-

cholesterol concentrations of margarines enriched with different vegetable oil sterols or sitostanol-ester. DESIGN: A randomized double-blind placebo-controlled balanced incomplete Latin square design with five treatments and four periods of 3.5 weeks. Margarines enriched with sterols from soybean, sheanut or ricebran oil or with sitostanol-ester were compared to a non-enriched control margarine. Sterol intake was between 1.5-3.3 g/d. Two thirds of the soybean oil sterols were esterified to **fatty acids**. SETTING: Unilever Research Laboratory, Vlaardingen, The Netherlands. SUBJECTS: One hundred healthy non-obese **normocholesterolaemic** and mildly **hypercholesterolaemic** volunteers aged 45+/-12.8 y, with plasma total **cholesterol** levels below 8 mmol/L at entry. MAIN OUTCOME MEASURES: Plasma lipid, carotenoid and sterol concentrations, blood clinical chemistry and haematology, **fatty acid** composition of plasma **cholesterylesters** and food intake. RESULTS: Ninety-five volunteers completed the study. None of the margarines induced adverse changes in blood clinical chemistry, serum total bile acids or haematology. Plasma total- and LDL-**cholesterol** concentrations were significantly reduced by 8-13% (0.37-0.44 mmol/L) compared to control for margarines enriched in soybean oil sterol-esters or sitostanol-ester. No effect on HDL-**cholesterol** concentrations occurred. The LDL- to HDL-**cholesterol** ratio was reduced by 0.37 and 0.33 units for these margarines, respectively. Effects on blood lipids did not differ between **normocholesterolaemic** and mildly **hypercholesterolaemic** subjects. Plasma sitosterol and campesterol levels were significantly higher for the soybean oil sterol margarine and significantly lower for the sitostanol-ester margarine compared to control. Dietary intake was very similar across treatments. The **fatty acid** composition of plasma **cholesterylesters** confirmed the good compliance to the treatment. All sterol enriched margarines reduced lipid-standardized plasma alpha- plus beta-carotene levels. Plasma lycopene levels were also reduced but this effect was not significant for all products. CONCLUSIONS: A margarine with sterol-esters from soybean oil, mainly esters from sitosterol, campesterol and stigmasterol, is as effective as a margarine with sitostanol-ester in lowering blood total- and LDL-**cholesterol** levels without affecting HDL-**cholesterol** concentrations. Incorporation in edible fat containing products of such substances may substantially reduce the risk of cardiovascular disease in the population.

CT Check Tags: Human; Support, Non-U.S. Gov't
Adult
Carotenoids: BL, blood
Cholesterol: AA, analogs & derivatives
***Cholesterol: BL, blood**
*Dietary Fats, Unsaturated: TU, therapeutic use
Double-Blind Method
***Hypercholesterolemia: TH, therapy**
Lipoproteins, HDL Cholesterol: BL, blood
***Lipoproteins, LDL Cholesterol: BL, blood**
*Margarine
Middle Age
***Phytosterols**
Placebos
Plant Oils: AD, administration & dosage
Sitosterols: AD, administration & dosage
Sitosterols: BL, blood
Soybean Oil: AD, administration & dosage

RN 474-62-4 (campesterol); **57-88-5 (Cholesterol)**; 5779-62-4 (sitosterol); 8001-22-7 (Soybean Oil); 8029-82-1 (Margarine); **83-45-4 (stigmastanol)**

CN 0 (Carotenoids); 0 (Dietary Fats, Unsaturated); 0 (Lipoproteins, HDL **Cholesterol**); 0 (Lipoproteins, LDL **Cholesterol**); 0 (Phytosterols); 0 (Placebos); 0 (Plant Oils); 0 (Sitosterols)

L85 ANSWER 2 OF 2 MEDLINE
AN 58092741 MEDLINE

DN 58092741
TI Combined **beta-sitosterol** and linoleic acid regimen for cholesterolfed rabbits.
AU POLLAK O J
SO J. Geront, (1958 Apr) 13 (2) 140-3.
DT Journal
LA English
FS OLDMEDLINE
OS CLML5834-42360-141-342-565
EM 195812
ED Entered STN: 20000825
Last Updated on STN: 20000825
ST cholesterol - in blood; linoleic acid - effects; steroids
RN 57-88-5 (CHOLESTEROL); **60-33-3Q, 30175-49-6Q (LINOLEIC ACID)**

=> fil wpix
FILE 'WPIX' ENTERED AT 08:38:38 ON 20 NOV 2001
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FILE LAST UPDATED: 19 NOV 2001 <20011119/UP>
MOST RECENT DERWENT UPDATE 200167 <200167/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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=> d all abeq tech tot l100

L100 ANSWER 1 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-475649 [51] WPIX
DNC C2001-142565
TI Solid composition for delivery of active agents e.g. glyburide comprises carrier optionally containing a substrate having an encapsulation coat containing hydrophilic surfactants e.g. polyoxyethylene alkylethers.
DC A96 B05 B07
IN CHEN, F; PATEL, M V
PA (LIPO-N) LIPOCINE INC
CYC 94
PI WO 2001037808 A1 20010531 (200151)* EN 106p A61K009-14
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
US 6248363 B1 20010619 (200151) A61K009-16
AU 2001017981 A 20010604 (200153) A61K009-14
ADT WO 2001037808 A1 WO 2000-US32255 20001122; US 6248363 B1 US 1999-447690 19991123; AU 2001017981 A AU 2001-17981 20001122
FDT AU 2001017981 A Based on WO 200137808
PRAI US 1999-447690 19991123
IC ICM A61K009-14; A61K009-16
ICS A61K009-20; A61K009-28; A61K009-32; A61K009-46; A61K009-48; A61K009-50; A61K009-52; A61K009-54; A61K009-56; A61K009-58
AB WO 200137808 A UPAB: 20010910
NOVELTY - Composition for improved delivery of active agent comprising a

solid carrier optionally containing a substrate having an encapsulation coat, where the solid carrier or encapsulation coat contains at least one active agent (I) and one hydrophilic surfactant (II), is new.

ADVANTAGE - The composition is used to deliver a wide variety of active agents having improved absorption and/or biovailability. It provides coated substrate materials without the need for binders. Prior art solid carriers are limited to a few specific drugs due to difficulties in formulating appropriate drug/exicipient compositions to effectively coat the active agent onto a carrier particle. Most of prior art solid dosage forms of hydrophilic active agents exhibit poor or no absorption of the active agent. Non-solid formulations of the same are chemically instable, leak and have capsule shell incompatibility. Conventional solid dosage forms of hydrophobic active agents often exhibit slow and incomplete dissolution and subsequent absorption. They often show a high propensity for biovariability and food interactions of the active agent, resulting in restrictive compliance/labeling requirements. A comparative dissolution study was performed on 3 forms of glyburide (Ia) namely coated beads of (Ia), commercially available (Ia) and pure (Ia) bulk. 5 mg Of each form was usd for triplication dissolution runs in 500 ml of isotonic pH 7.4 phosphate buffer.The dissolutiom medium was sampled at 15, 30, 45, 60, 120 and 180 minutes. The samples were filtered and the filtrates diluted for (Ia)-specific HPLC assay. The (Ia)-coated beads showed a superior dissolution profile in the rate, extent and variability of (Ia) dissolved/released into the medium.

Dwg.0/3

FS CPI

FA AB; DCN

MC CPI: A10-E08; A12-V01; A12-W12C; **B01-C04**; **B01-D01**; **B01-D02**; B03-H; B04-B01C1; B04-C02D; B04-C02X; B04-C03C; B04-D01; B04-N04; B05-B01P; B06-D05; B07-H; B10-A08; B10-A09A; B10-A09B; B10-A22; B10-C04D; B10-C04E; B12-M07; B12-M08; B12-M09; B12-M10; B12-M11

TECH UPTX: 20010910

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: (I) is a drug, a nutrient, a cosmeceutical and/or a diagnostic agent. The substrate may be an additive and/or an active agent. (I) may be hydrophobic having an intrinsic aqueous solubility of less than 1 mg/ml. (I) may be hydrophilic with an apparent water solubility of at least 1 mg/ml. Hydrophilic (I) is selected from a drug, cytokine, peptidomimetic, peptide, protein, toxoid, serum, antibody, vaccine, nucleoside, nucleotide, genetic material and/or nucleic acid. The encapsulation coat further comprises at least one lipophilic additive selected from lipophilic surfactants and/or triglycerides. The composition is encapsulated, extruded, compressed, pelletized, coated, mixed, granulated, crystallized, Iyophilized or molded. It may be formulated as a capsule, a tablet, an ovule, a suppository, a wafer, a chewable tablet, a buccal tablet, a sub-lingual tablet, a quick-dissolve tablet, an effervescent tablet, a granule, a pellet, a bead, a pill, a sachet, a sprinkle, a film, a dry syrup, a reconstitutable solid, a suspension, a lozenge, a troche, an implant, a powder, a triturate, a platelet, or a strip. It may be formulated for immediate release, pulsatile release, controlled release, extended release, delayed release, targeted release, or targeted delayed release.

Preferred Substrate: The substrate is a powder or a multiparticulate. It may be an additive comprising a solubilizer, an enzyme inhibitor, an anti-adherent, an anticoagulant, an antifoaming agent, an antioxidant, a binder, a bufferant, a chelating agent, a coagulant, a colorants or opaquants, a coolant, a cryoprotectant, a diluent or filler, a disintegrant or super disintegrant, a hydrogen bonding agent, a flavorant or desensitizer, an ion-exchange resin, a plasticizer, a preservative, a solvent, a sweetener and/or a thickener. the substrate is a multiparticulate comprised of a granule, a pellet, a bead, a spherule, a beadlet, a microcapsule, a millisphere, a nanocapsule, a nanosphere, a microsphere, a platelet, a tablet or a capsule.

Preferred Carrier: The carrier is a bead, a beadlet, a granule, a spherule, a pellet, a microcapsule, a microsphere, a nanosphere, a film, a

wafer, a sprinkle, an implant, a troche, a lozenge, a platelet, a nanocapsule or a strip. It is enteric coated, coated for fast disintegration, seal coated, film coated, barrier coated, compress coated, or coated with an enzyme-degradable coating.
Preferred Lipophilic Additive: The lipophilic additive is selected from alcohols, polyoxyethylene alkylethers, **fatty acids**, bile acids, glycerol **fatty acid** esters, acetylated glycerol **fatty acid** esters, lower alcohol **fatty acids** esters, polyethylene glycol **fatty acids** esters, polyethylene glycol glycerol **fatty acid** esters, polypropylene glycol **fatty acid** esters, polyoxyethylene glycerides, lactic acid derivatives of mono/diglycerides, propylene glycol diglycerides, sorbitan **fatty acid** esters, polyoxyethylene sorbitan **fatty acid** esters, polyoxyethylenepolyoxypropylene block copolymers, transesterified vegetable oils, sterols, sterol derivatives, sugar esters, sugar ethers, sucroglycerides, polyoxyethylene vegetable oils, polyoxyethylene hydrogenated vegetable oils, reaction mixtures of polyols and at least one **fatty acid**, glyceride, optionally hydrogenated vegetable oils, and/or sterols. The triglyceride is selected vegetable oils, fish oils, animal fats, hydrogenated vegetable oils, partially hydrogenated vegetable oils, synthetic triglycerides, modified triglycerides, and/or fractionated triglycerides.
Preferred Surfactant: (II) is a non-ionic surfactant (IIa) having an hydrophilic-lipophilic balance (HLB) value of at least 10 or an ionic surfactant (IIb). (IIa) is selected from alkylglucosides, alkylmaltosides, alkylthioglucosides, lauryl macrogolglycerides, polyoxyethylene alkyl ethers, alkylphenols, or sorbitan **fatty acid** esters, polyethylene glycol glycerol **fatty acid** esters, polyoxyethylene- polyoxypropylene block copolymers, polyglycerol **fatty acid** esters, polyoxyethylene glycerides, polyoxyethylene sterols, polyoxyethylene vegetable oils, polyoxyethylene hydrogenated vegetable oils and/or reaction mixtures of polyols and at least one **fatty acid**, glyceride, vegetable oil, hydrogenated vegetable oil, and sterol, tocopherol polyethylene glycol succinate, sugar ester, sugar ether and/or sucroglycerides. (IIb) is selected from alkyl ammonium salts, bile acids and their salts, or derivatives, **fatty acid** derivatives of amino acids, carnitines, oligopeptides, and polypeptides, glyceride derivatives of amino acids, oligopeptides, and polypeptides, acyl lactylates, mono-or diacetylated tartaric acid esters of mono- or diglycerides, succinylated monoglycerides, citric acid esters of mono- or diglycerides, alginate salts, propylene glycol alginate, optionally hydrogenated lecithins, optionally hydrogenated lysolecithins, lysophospholipids, phospholipids, alkylsulfate salts, **fatty acid** salts and/or sodium docusate.
TECHNOLOGY FOCUS - POLYMERS - Preferred Surfactant: (II) is a non-ionic surfactant (IIa) having an hydrophilic-lipophilic balance (HLB) value of at least 10 or an ionic surfactant (IIb). (IIa) is selected from alkylglucosides, alkylmaltosides, alkylthioglucosides, lauryl macrogolglycerides, polyoxyethylene alkyl ethers, alkylphenols, or sorbitan **fatty acid** esters, polyethylene glycol glycerol **fatty acid** esters, polyoxyethylene- polyoxypropylene block copolymers, polyglycerol **fatty acid** esters, polyoxyethylene glycerides, polyoxyethylene sterols, polyoxyethylene vegetable oils, polyoxyethylene hydrogenated vegetable oils and/or reaction mixtures of polyols and at least one **fatty acid**, glyceride, vegetable oil, hydrogenated vegetable oil, and sterol, tocopherol polyethylene glycol succinate, sugar ester, sugar ether and/or sucroglycerides. (IIb) is selected from alkyl ammonium salts, bile acids and their salts, or derivatives, **fatty acid** derivatives of amino acids, carnitines, oligopeptides, and polypeptides, glyceride derivatives of amino acids, oligopeptides, and polypeptides, acyl lactylates, mono-or diacetylated tartaric acid esters of mono- or diglycerides, succinylated monoglycerides, citric acid esters of mono- or diglycerides, alginate salts, propylene glycol alginate, optionally

hydrogenated lecithins, optionally hydrogenated lysolecithins, lysophospholipids, phospholipids, alkylsulfate salts, **fatty acid** salts and/or sodium docusate.
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Active Agent: (I) is selected from hydrophobic agents that are analgesics, anti-inflammatory agents, anthelmintics, anti-arrhythmic agents, anti-bacterial agents, anti-viral agents, anti-coagulants, anti-depressants, anti-diabetics, anti-epileptics, anti-fungal agents, anti-gout agents, anti-hypertensive agents, anti-malarials, anti-migraine agents, anti-muscarinic agents, anti-neoplastic agents, erectile dysfunction improvement agents, immunosuppressants, anti-protozoal agents, anti-thyroid agents, anxiolytic agents, sedatives, hypnotics, neuroleptics, D-Blockers, cardiac inotropic agents, corticosteroids, diuretics, anti-parkinsonian agents, gastro-intestinal agents, histamine receptor antagonists, keratolytics, lipidregulating agents, anti-anginal agents, COX-2 inhibitors,leucotriene inhibitors, macrolides, muscle relaxants, nutritional agents, opioid analgesics, protease inhibitors, sex hormones, stimulants, muscle relaxants, anti-osteoporosis agents,anti-obesity agents, cognition enhancers, anti-urinary incontinence agents, nutritional oils, anti-benign prostate hypertrophy agents, essential **fatty acids** and/or non-essential **fatty acids**. (I) is selected from acutretin, albendazole, albuterol, aminogluthemide, amiodarone, arniodipine, amphetamine, amphotericin B, atorvastatin, atovaquone, azithromycin, bactofen, beclomethsone, benezepril, benzonatate, betamethasone, bicalutanide, budesonide, bupropion, busulphan, butenafine, calcifediol, calciprotiene, calcitriol, camptothecan, candesartan, capsaicin, carbamezepine, carotenes, celecoxib, cerivistatin, cetrizine, chlorpheniramine, cholecalciferol, cilostazol, cimetidine, cinnarizine, ciprofloxacin, cisapride, clarithromycin, clemastine, clormphene, clornipramine, clopidrogel, codeine, coenzyme Q10, cyclobenzaprine, cyclosporine, danazol, dantrolene, dexchlopheniramine, diclofenac, dicournarol, digoxin, dihydroepiandrosterone, dihydroergotamine, dihydrotachysterol, dirithromycin, donepezil, efavirenz, eposartan, ergocalciferol, ergotarnine, essential **fatty acid** sources, etodolac, etoposide, famotidine, fenofibrate, fentanyl, fexofenadine, finasteride, flucanazole, flurbiprofen, fluvastatin, fosphenytion, frovatriptan, furazolidone, gabapentin, gemfibrozil, glibenclamide, glipizide, glyburide, glymepride, griseofulvin, halofantrine,lbuprofen, irbesartan, irinotecan, isosorbide dinitrate, isotreinoin, itraconazole, ivermectin, ketoconazoie, ketorolac, lamotrigine, lanosprazole, leflunomide, lisinopril,loperamide, loratadine, lovastatin, L-thryroxine, lutein, lycopene, medroxyprogesterone,mefepristo ne, mefloquine, megesterol acetate, methadone, methoxsalen, metronidazole, metronidazole, miconazole, midazolam, miglitol, minoxidil, mitoxantrone, montelukast, nabumetone, nalbuphine, naratiptan, nelfinavir, nifedipine, nilsolidipine, nilutanide, nitrofurantoin, nizatidine, orneprazole, oprevelkin, osteradiol, oxaprozin, paclitaxel, paricalcitol, paroxetine, pentazocine, pioglitazone, pizofetin, pravastatin, prednisolone, probucol, progesterone, pseudo-ephedrine, pyridostigmine, rabeprazole, raloxifene, refocoxib, repaglinide, rifabutine, rifapentine, rimexolone, ritanovir, rizatriptan, rosigiltazone, saquinavir, sertraline, sibutramine, sildenafil citrate, simvastatin, sirolimus, spironolactone, sumatriptan, tacrine, tacrolimus, tamoxifen, tamsulosin, targretin,tazarotene, telmisartan, teniposide, terbinafine, terzosin, tetrahydrocannabinol, tiagabine,ticlidopine, tirofibran, tizanidine, topiramate, topotecan, toremifene, trarnadol, tretinoin, troglitazone, trovafloxacin, ubidecarenone, valsartan, venlafaxine, vertoporfin, vigabatrin, vitamin A, vitamin D, vitamin E, vitamin K, zafirlukast, zileuton, zolmitriphan, zolpidem and/or zopiclone. (I) may also be selected from acarbose, acylovir, acetylcysteine, acetylcholine chloride, alatrofloxacin, alendronate, alglucerase, amantadine hydrochloride, ambenomium, amifostine, amiloride hydrochloride, aminocaproic acid, amphotericin B, antihemophilic factor (human), antihemophilic factor (porcine), antihemophilic factor (recombinant), aprotinin, asparaginase, atenolol, atracurium besylate, atropine, azithromycin, aztreonam, BCG vaccine, bacitracin, becalermin, belladona, bepridil hydrochloride, bleomycin

sulfate, calcitonin human, calcitonin salmon, carboplatin, capecitabine, capreomycin sulfate, cefamandole nafate, cefazolin sodium, cefepime hydrochloride, cefixime, cefonicid sodium, cefoperazone, cefotetan disodium, cefotoxime, cefoxitin sodium, ceftizoxime, ceftriaxone, cefuroxime axetil, cephalexin, cephapirin sodium, cholera vaccine, chrionic gonadotropin, cidofovir, cisplatin, cladribine, clidinium bromide, clindamycin and clindamycin derivatives, ciprofloxacin, clondronate, colistimethate sodium, colistin sulfate, cortocotropin, cosyntropin, cromalyn sodium, cytarabine, daltaperin sodium, danaproid, deforoxamine, denileukin diftitox, desmopressin, diatrizoate megluamine and diatrizoate sodium, dicyclomine, didanosine, dirithromycin, dopamine hydrochloride, domase alpha, doxacurium chloride, doxorubicin, editronate disodium, elanaprilat, enkephalin, enoxacin, enoxaprin sodium, ephedrine, epinephrine, epoetin alpha, erythromycin, esmol hydrochloride, factor IX, famiciclovir, fludarabine, fluoxetine, foscarnet sodium, ganciclovir, granulocyte colony stimulating factor, granulocyte-macrophage stimulating factor, growth hornone-recombinant human, growth hormone-bovine, gentamycin, glucagon, glycopyrolate, gonadotropin releasing hormone and synthetic analogs, GnRH, gonadorelin, grepafloxacin, hemophilus B **conjugate** vaccine, Hepatitis A virus vaccine inactivated, Hepatitis B virus vaccine inactivated, heparin sodium, indinavir sulfate-, influenza virus vaccine, interleukin-2, interleukin-3, insulin-human, insulin lispro, insulin procine, insulin NPH, insulin aspart, insulin glargine, insulin detemir, interferon alpha, interferon beta, ipratropium bromide, isofosfamide, japanese encephalitis virus vaccine, lamivudine, leucovorin calcium, leuprolide acetate, levofloxacin, lincomycin and lincomycin derivatives, lobucavir, lomefloxacin, loracarbef, mannitol, measles virus vaccine, meningococcal vaccine, menotropins,mephenzolate bromide, mesalmine, methanamine, methotrexate, methscopolamine, metformin hydrochloride, metroprolol, mezocillin sodium, rnivacurium chloride, mumps, viral vaccine, nedocromil sodium, neostigmine bromide, neostigmine methyl sulfate, neutontin, norfloxacin, octreotide acetate, ofloxacin, olpadronate, oxytocin, pamidronate disodium, pancuronium bromide, paroxetine, pefloxacin, pentarnindine isethionate, pentostatin, pentoxifylllne, periciclovir, pentagastrin, phentolarnine mesylate, phenylalanine, physostigmine salicylate, plague vaccine, piperacillin sodium, platelet derived growth factor-human, pneumococcal vaccine polyvalent, poliovirus vaccine inactivated, pollovirus vaccine live (OPV), polymixin B sulfate, pralidoxine chloride, pramlintide, pregabalin, propofenone, propenthaline bromide, pyridostigmine bromide, rabies vaccine, residronate, ribavarin, rimantadine hydrochloride, rotavirus vaccine, salmetrol xinafoate, sincalide, small pox vaccine, solatol, somatostatin, sparfloxacin, spectinomycin, stavudine, streptokinase, streptozocin, suxamethoniurn chloride, tacrine hydrochloride, terbutaline sulfate, thiopeta, ticarcillin, tiludronate, timolol, tissue type plasminogen activator, TNFR:Fc, TNK-tPA, trandolapril, trimetrexate gluconate, trospectinomycin, trovafloxacin, tubocurarine chloride, tumor necrosis factor, typhoid vaccine live, urea, urokinase, vancomycin, valaciclovir, valsartan, varicella virus vaccine live, vasopressin and vasopressin derivatives, vecoronium bromide, vinblastin, vincristine, vinorelbine, vitamin B12 , warfarin sodium, yellow fever vaccine, zalcitabine, zanamavir, zolandronate, and/or zidovudine.

L100 ANSWER 2 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-366605 [38] WPIX
DNC C2001-112395
TI Targeting pharmaceutical agents to non-central nervous system tissues to treat e.g. psoriasis by administering covalent **conjugates** of unbranched naturally occurring **fatty acid** and pharmaceutical agent.
DC B07
IN BRADLEY, M O; SHASHOUA, V E; SWINDELL, C S; WEBB, N L
PA (BRAD-I) BRADLEY M O; (SHAS-I) SHASHOUA V E; (SWIN-I) SWINDELL C S; (WEBB-I) WEBB N L
CYC 1
PI US 2001002404 A1 20010531 (200138)* 43p A61K031-20

ADT US 2001002404 A1 Cont of US 1996-651428 19960522, US 2000-730450 20001205
PRAI US 1996-651428 19960522; US 2000-730450 20001205
IC ICM A61K031-20
AB US2001002404 A UPAB: 20010711
NOVELTY - Methods for targeting pharmaceutical agents to non-central nervous system (CNS) tissues to treat non-CNS conditions by administering:

(a) a covalent **conjugate** of an 8-26C unbranched naturally occurring **fatty acid**; and

(b) a pharmaceutical agent effective in treating the condition, excluding adenosine receptor (ant)agonists.

ACTIVITY - Cytostatic; antipsoriatic; keratolytic; antidiabetic; antilipemic; antidiarrheic; gynecological.

MECHANISM OF ACTION - None given.

USE - The methods are used to target pharmaceutical agents to non-CNS tissues to treat non-CNS conditions including breast, gastrointestinal, ovarian, blood and blood forming, cardiovascular system, digestive and excretory system, endocrine system, muscular system, reproductive system, respiratory system, skeletal system and fiber and integumentary system tissues (claimed) specifically platelets, blood vessel wall and bone marrow tissue, heart and vascular tissue, excretory system tissue, alimentary tract, biliary tract, kidney, liver, pancreas and urinary tract tissue, adrenal gland, kidney, ovary pituitary gland, renal gland, salivary gland, sebaceous gland, testis, thymus gland and thyroid gland tissue, reproductive system tissue e.g. penile and uterine tissue, bronchial, lung and tracheal tissue, bones and joints, adipose tissue, cartilage, connective tissue, cuticles, dermis, epidermis, epithelial, fascial (sic), hair follicle, ligament, bone marrow, melanin, melanocytes, mucous membrane, skin soft tissue, synovial capsule and tendon tissue. They are used to target pharmaceutical agent such as adrenergic agents, adrenocortical steroids, adrenocortical suppressants, alcohol deterrents, aldosterone antagonists, amino acids, ammonia detoxicants, anabolics, analeptics, analgesics, androgens, anesthetic adjuncts, anesthetics, anoretics, antagonists (atipamezole, isradipine, naloxone), anterior pituitary suppressants, anthelmintics, antiacne agents, antiadrenergics, antiallergics, antiamebics, antiandrogens, antianemics, antianginals, anxiolytics, antiarthritics, antiasthmatics, antiatherosclerotics, antibacterials, anticholelithics, anticholelithogenics, anticholinergics, anticoagulants, coccidiostatics, anticonvulsants, antidepressants, antidiabetics, antidiarrheals (diphenoxylate hydrochloride, metronidazole, methylprednisolone, sulfasalazine), antidiuretics, antidotes, antiemetics, antiepileptics, antiestrogens, antifibrinolytics, antifungals, antiglaucoma agents, antihemophilics, antihemorrhagics, antihistamines, antihyperlipidemics, antihyperlipoproteinemics, antihypertensives, antihypotensives, antiinfectives, topical antiinfectives, antiinflammatories, antikeratinizing agents, antimalarials, antimicrobials, antimigraine agents, antimitotics, antimycotics, antinauseants, antineoplastics, antineutropenics, antiobsessional agents, antiparasitics, antiparkinsonian agents, antiperistaltics, antipneumocystics, antiproliferatives, antiprostatic hypertrophy agents, antiprotozoals, antipruritics, antipsychotics, antirheumatics, antischistosomals, antiseborrheics, antisecretory agents, antispasmodics, antithrombotics, antitussives, antiulceratives, antiurolithics, virucides, appetite suppressants, benign prostatic hyperplasia therapies, blood glucose regulators (tolazamide, tolbutamide, chlorpopamide, acetohexamide, glipizide), bone resorption inhibitors, bronchodilators, carbonic anhydrase inhibitors, cardiac depressants, cardioprotectants, cardiotonics, cardiovascular agents, choleretics, cholinergics, cholinergic agonists, cholinesterase deactivators, cognition adjuvants, cognition enhancers, depressants, diagnostic aids, diuretics, dopaminergic agents, ectoparasiticides, emetics, enzyme inhibitors, estrogen, fibrinolytics, fluorescent agents, free oxygen radical scavengers, gastrointestinal motility effectors (cisapride, metoclopramide, hyoscyamine), glucocorticoids, gonad-stimulating principals, hair growth stimulators, hemostatics, histamine H2 receptor antagonists, hormones (progesterone, norgestrel, norethynodrel, norethindrone, levonorgestrel, ethyndiol, mestranol, estrone, equilin, 17-alpha dihydroquilin, equilenin,

17-alpha dihydroequilenin, 17-alpha estradiol, 17-beta estradiol, leuprolide, testolactone, climiphene, urofollitropini, bromocropitine, gonadorelin, danazol, dehydroepiandrosterone, androstenedione, dihydrotestosterone, relaxin, folliculostatin, follicule regulatory protein, gonadocrinins, oocyte maturation inhibitor and insulin growth factor), hypocholesterolemics, hypoglycemics, hypolipidemics such as HMG-CoA reductase inhibitors (lovastatin, simvastatin, pravastatin, fluvastatin), hypotensives, imaging agents, immunizing agents, immunomodulators, immunoregulators, immunostimulators, immunosuppressants, impotency therapy adjuncts, inhibitors, keratolytics, luteinizing hormone releasing hormone agonists, liver disorder treatments, luteolysin, memory adjuvants, mental performance enhancers, mood regulators, mucolytics, mucosal protective agents, mydriatics, nasal decongestants, neuromuscular blocking agents, neuroprotectives, N-methyl-D-aspartate antagonists, non-hormonal sterol derivatives, oxytocics, plasminogen activators, platelet activating factor antagonists, platelet aggregation inhibitors, post-stroke and post-head trauma treatments, potentiators, progestin, prostaglandins, prostate growth inhibitors, prothyrotropics, psychotropics, pulmonary surface radioactive agents, regulator (e.g. calcifediol, etidronic acid, risedronate sodium), relaxant (e.g. adiphenine hydrochloride, flurazepam hydrochloride, papaverine hydrochloride), repartitioning agent, scabicides, sclerosing agents, sedatives, sedative-hypnotics, selective adenosine A1 antagonists, serotonin antagonists, serotonin inhibitors, serotonin receptor antagonists, steroids, stimulants (e.g. amfonelic acid, dextroamphetamine, histamine phosphate), suppressants (e.g. amflutizole, colchicines, tazofelone), symptomatic multiple sclerosis agents, synergists (proadifen hydrochloride), thyroid hormones, thyroid inhibitors, thyromimetics, tranquilizers, amyotrophic lateral sclerosis agents, cerebral ischemia agents, Paget's disease agents, unstable angina agents, uricosurics, vasoconstrictors, vasodilators, vulnerary agents, USund healing agents, xanthine oxidase inhibitors and mucosal protectives (misoprostol). They may be used to administer anticancer cocktails. They may be used to treat mammalian cell proliferative disorders other than cancer including psoriasis, actinic keratosis, diabetes and its complications, excess acid secretion, cardiovascular conditions involving cholesterol (hyperlipidemia and hypercholesterolemia), diarrhea and ovarian diseases (endometriosis, ovarian cysts) and as contraceptives.

Dwg.0/27

FS CPI

FA AB; DCN

MC CPI: **B01-A01; B01-A02; B01-B02; B01-B04; B01-C04; B01-C05; B01-C09; B01-D02;** B03-G; B04-A04; B04-C01B; B04-H03; B05-B01F; B05-B01G; B06-H; B07-H; B10-A08; B10-B01A; B10-B02G; B10-B04B; B10-C04E; B10-E04C; B12-M05; B14-E02; B14-F06; B14-H01; B14-N14; B14-N17; B14-S04

TECH UPTX: 20010711

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method: The tissue is breast tissue, gastrointestinal tissue or ovarian tissue. The tissue is blood and blood forming tissue, cardiovascular system tissue, digestive and excretory system tissue, endocrine system tissue, muscular system tissue, reproductive system tissue, respiratory system tissue, skeletal system tissue and fiber and integumentary system tissue.

Preferred Active Agent: The pharmaceutical agent is a non-CNS active agent that is not active within the CNS. The pharmaceutical agent is an anticancer agent. The **fatty acid** is C8:0 (caprylic acid), C10:0 (capric acid), C12:0 (lauric acid), C14:0 (myristic acid), C16:0 (palmitic acid), C16:1 (palmitoleic acid), C16:2, C18:0 (stearic acid), C18:1 (oleic acid), C18:1-7 (vaccenic acid), C18:2-6 (linoleic acid), C18:3-3 (alpha-linolenic acid), C18:3-5 (eleostearic acid), C18:3-6 (delta-linolenic acid), C18:4-3, C20-1 (gondoic acid), C20:2-6, C20:3-6 (dihomo-y-linolenic acid), C20:4-3, C20:4-6 (arachidonic acid), C20:5-3 (eicosapentaenoic acid), C22:1 (docosenoic acid), C22:4-6 (docosatetraenoic acid), C22:5-6 (docosapentaenoic acid), C22:6-3 (docosahexaenoic acid) and C24:1-9 (nervonic acid).

L100 ANSWER 3 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-355171 [37] WPIX
DNC C2001-109993
TI Modified egg useful as food for human consumption comprises reduced cholesterol and saturated **fatty acid** content and contains omega-3 unsaturated **fatty acid**.
DC B05 D13
IN COMPTON, J D; STOCK, R H
PA (LIFE-N) LIFERIGHT FOODS LLC
CYC 94
PI WO 2001030180 A1 20010503 (200137)* EN 29p A23L001-32
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000077323 A 20010508 (200149) A23L001-32
ADT WO 2001030180 A1 WO 2000-US26762 20000928; AU 2000077323 A AU 2000-77323 20000928
FDT AU 2000077323 A Based on WO 200130180
PRAI US 1999-427297 19991026
IC ICM A23L001-32
AB WO 200130180 A UPAB: 20010704
NOVELTY - A modified egg comprises (mg): cholesterol (less than 160), saturated **fatty acid** (less than 1.2 g), omega-3 unsaturated **fatty acid** (at least about 70), decosahexaenoic acid (0 - 300) and **conjugated** linoleic acid (0 - 10), per 50 g of the edible egg. The modified egg is a whole shell poultry egg.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a poultry feed for production of eggs from egg-laying hens with a supplemented content comprising cholesterol lowering agent (0.01-10 g), total omega -3 unsaturated **fatty acid** (1.4-8 g), decosahexaenoic acid (0-6 g), **conjugated** linoleic acid (0-100 mg), vitamin E (0-400 mg), folate (0-250 mu g), iodine derivative (0-400 mu g) and carotenoid pigment (0-40 mg), per feed kg;

(2) producing the modified egg involving feeding egg-laying hens with the poultry feed; and

(3) a poultry egg comprising saturated **fatty acid** (less than 1.2 g) and unsaturated **fatty acid** (at least 2 g), per 50 g of edible egg and an antioxidant.

ACTIVITY - Cardiant; antiatherosclerotic; antilipemic; hypotensive; anabolic.

MECHANISM OF ACTION - None given.

USE - As food for human consumption.

ADVANTAGE - The modified egg has enhanced health and nutritive values for human consumption. As the egg has reduced cholesterol and saturated **fatty acid** content, its consumption reduces the risk of cardiovascular diseases such as atherosclerosis, myocardial infarction and hypertension. As the egg also contains a polyunsaturated **fatty acid** such as omega -3 unsaturated **fatty acid**, it further reduces the risk of coronary heart disease. The egg also has lower saturated to unsaturated **fatty acid** ratio and reduced total **fatty acid** content.

Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: **B01-D02**; B04-B01C1; B04-B04M; B10-C04E; B14-E11; B14-F01B; B14-F01E; B14-F02B; B14-F07; B14-S12; D03-G01; D03-H01T2; D03-H01T3; D03-M
TECH UPTX: 20010704
TECHNOLOGY FOCUS - FOOD - Preferred Egg: The modified egg is a chicken egg, turkey egg, duck egg, goose egg. The modified egg is in a de-shelled

edible egg form. The yolk has a Roche Color Scale value of about 8-15.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: The modified egg contains: cholesterol (106-160 mg), saturated **fatty acid** (0.8-1.2 g), total omega-3 unsaturated **fatty acid** (70-400 mg), decosahexaenoic acid (5-300 mg), **conjugated** linoleic acid (1-10 mg), vitamin E (0.5-10 mg), folate (10-150 microg) and iodine (1-120 microg), per 50 g of the edible egg. The cholesterol-lowering agent is selected from a tall oil phytosterol extract, canola oil phytosterol extract and/or soy oil phytosterol extract; a polysterol selected from beta-sitostenol, beta-sitostanol, campesterol, stigmasterol, brassicasterol and/or brassicastanol; Monascus Red Yeast Rice; a copper derivative (10-300 mg) in combination with the phytosterol. The antioxidant is vitamin E or ethoxyquin.

L100 ANSWER 4 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2001-307944 [32] WPIX
CR 2001-273384 [22]; 2001-407786 [22]
DNC C2001-095062
TI New compositions comprising **conjugated** linoleic acid and food grade antioxidants, useful in e.g. treating atherosclerosis and for enhancing the immune response.
DC B05 D13
IN GHISALBERTI, C
PA (GHIS-I) GHISALBERTI C
CYC 94
PI WO 2001017374 A1 20010315 (200132)* EN 27p A23L001-30
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000067203 A 20010410 (200137) A23L001-30
ADT WO 2001017374 A1 WO 2000-IB1277 20000908; AU 2000067203 A AU 2000-67203 20000908
FDT AU 2000067203 A Based on WO 200117374
PRAI IT 1999-MI1894 19990909
IC ICM A23L001-30
ICS A61K031-20
AB WO 200117374 A UPAB: 20010801
NOVELTY - Oral composition comprising as active ingredients **conjugated** linoleic acid or one of its derivatives (CLA) and at least one food grade antioxidant, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the use of a combination of CLA and a food grade antioxidant for the manufacture of dietetic composition or a medicament useful in the treatment of atherosclerosis, overweight (sic) and enhancing the immune response.

ACTIVITY - Antiarteriosclerotic; anorectic.

Three different soft gel capsules were prepared.

(1) Capsules (1) (no CLA) contained soybean **fatty acids** (0.99 g), alpha-tocopherol (0.01 g), bees wax (0.10 g) and gelatin (0.25 g);

(2) Capsules (2) (CLA without antioxidants) contained CLA-free **fatty acid** (0.8 g), soybean **fatty acids** (0.19 g), alpha-tocopherol (0.01 g), bees wax (0.1 g) and gelatin (0.25 g); and

(3) Capsules (3) (CLA with lipophilic antioxidants) contained CLA-free **fatty acid** (0.6 g), alpha-tocopherol (0.1 g), beta-carotene (0.05 g), alpha-lipoic acid (0.25 g), bees wax (0.1 g) and gelatin (0.25 g).

In tests to evaluate oxidative stress in plasma, the capsules were administered to a group of 9 subjects, and the level of oxygenated radicals in blood (expressed in Carratelli Units (Carr.U.)) was measured. The mean values for capsules (1) after days 0, 10 and 20 were 227, 235 and

221 Carr.U., respectively. The mean values for capsules (2) after days 0, 10 and 20 were 216, 295 and 342 Carr.U. respectively. The mean values for capsules (3) after days 0, 10 and 20 were 231, 246 and 238 Carr.U. respectively. The results showed that the level of lipoperoxidative stress was partially restored to the original values by the combined use of CLA and one food-grade lipophilic antioxidants.

MECHANISM OF ACTION - None given.

USE - The invention is useful in the treatment of atherosclerosis, overweight (sic) and enhancing the immune response.

ADVANTAGE - Combined use of CLA and food-grade lipophilic antioxidants partially restores the level of lipoperoxidative stress to its original value.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: **B01-D02**; B03-A; B03-F; B03-H; B04-B01B; B06-D18; B07-A02B; B07-B03; B10-C03; B10-C04E; B10-E02; B12-M11C; B14-E12; B14-F07; D03-G01; D03-H01T2

TECH UPTX: 20010611

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: The weight ratio of CLA to food grade antioxidant ranges from 10:1-1:5, preferably 4:1-1:1. CLA derivatives comprise one or more cis and trans isomers of the 9,11-10,12, and 11,13-octadecadienoic acids, its phospholipid and its mono-, di and tri-glycerides, ethers, esters or salts. The food grade antioxidant is selected from flavonoids, lipophilic antioxidant vitamins and plant phenols. The substance with a flavonoid structure is selected from bioflavonoids, proanthocyanosids, anthocyanins and/or isoflavones. The vitamin is selected from tocopherols, carotenoids, lipoates and/or ubiquinones. The plant phenols are selected from ethoxyquin, tyrosol, hydroxytyrosol and its esters (e.g. oleuropeine verbascoside) boldine, peanut hull antioxidants, nordihydroguaiaretic (NDGA) and its esters, guaiac gum, erythorbic acid and its salts (e.g. sodium erythorbate), cardanol, cardol, anacardicacid, oryzanol, propyl gallate and gallic esters and/or trihydroxy butyrophenol (THBP). The composition is in a liquid form that is appropriate to be mixed with food or drinks, baby food, in further functional foods or in food for animals.

L100 ANSWER 5 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 2001-257661 [26] WPIX

DNC C2001-077562

TI Nutritional supplement, which can be added to foodstuffs used for lowering blood cholesterol, e.g. cooking oils, comprises an ester formed between a sterol and an omega-3 **fatty acid**.

DC B01 B05 D13

IN KRALOVEC, J A; WRIGHT, J L C

PA (OCEA-N) OCEAN NUTRITION CANADA LTD

CYC 94

PI WO 2001015552 A1 20010308 (200126)* EN 36p A23L001-30

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000068137 A 20010326 (200137) A23L001-30

ADT WO 2001015552 A1 WO 2000-CA1011 20000830; AU 2000068137 A AU 2000-68137 20000830

FDT AU 2000068137 A Based on WO 200115552

PRAI US 1999-385834 19990830

IC ICM A23L001-30

ICS **A61K031-575**; **C07J009-00**; C11C003-00

AB WO 200115552 A UPAB: 20010515

NOVELTY - Nutritional supplement, used for lowering blood cholesterol and triglyceride levels in the bloodstream, comprises an ester formed between a sterol and an omega -3 **fatty acid**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the

preparation of a nutritional supplement as above comprising reacting a sterol with an omega -3 **fatty acid** or an ester of it, in the presence of a base.

ACTIVITY - Antilipemic.

Tests were performed to evaluate the effects of a phytosterol-fish oil ester-containing diet on guinea pig plasma lipid levels. A group of test guinea pigs were fed a mixture of the supplement (2.5 %) and corn oil (5:1), while a control group received only corn oil. Both group had diets supplemented with 0.08 % cholesterol. After 2 weeks the control group had 1.72 plus or minus 0.38 mM total cholesterol and 0.92 plus or minus 0.26 mM triacylglycerol, while the test group had 1.22 plus or minus 0.10 mM total cholesterol and 0.77 plus or minus 0.22 mM triacylglycerol. After 4 weeks the control group had 2.05 plus or minus 0.10 mM total cholesterol and 0.87 plus or minus 0.16 mM triacylglycerol, while the test group had 1.32 plus or minus 0.20 mM total cholesterol and 0.62 plus or minus 0.13 mM triacylglycerol.

MECHANISM OF ACTION - None given.

USE - The nutritional supplement is used for lowering blood cholesterol and triglyceride levels in the bloodstream. The nutritional supplement may be incorporated into foodstuffs (all claimed). Such foodstuffs include margarine, cooking oil, shortening, mayonnaise, baked goods, candy, ice-cream, yoghurts, frozen desserts, cake mixes and pudding mixes.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: **B01-C11**; **B01-D02**; **B14-D02A2**; B14-F06; D01-B02; D03-C01; D03-C02; D03-E; D03-E08; D03-H; D03-H01T2

TECH UPTX: 20010515

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Compounds: The sterol is a phytosterol, preferably stigmasterol, sitosterol, fucosterol, fucostanol, or beta-sitosterol. The omega-3 **fatty acid** is of formula CH3CH2CH=CH-R1-C(O)OH (I).

R1 = 3-40 C alkylene having at least one (preferably 2-5) **double bonds**.

The omega-3 **fatty acid** is eicosapentenoic acid (EPA) or docosahexenoic acid (DHA). The omega-3 **fatty acid** may be derived from fish oil. The supplement may further comprise an additive.

Preferred Process: The base is a metal 1-10C alkoxide, preferably sodium methoxide. The process further comprises the steps of: (a) precipitating unreacted sterol with a suitable non-polar solvent, and filtering off the precipitated unreacted sterol to leave a filtrate and/or (b) extracting the filtrate with an immiscible solvent to remove unreacted omega-3 **fatty acid** or an ester of it, from the filtrate. The non-polar solvent is hexane. The immiscible solvent is methanol.

L100 ANSWER 6 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 2001-137862 [14] WPIX

DNC C2001-040466

TI Use of nanoparticulate sterols and sterol esters as hypocholesterolemic additives for food, including mayonnaise, cooking oils, sausages and confectionery.

DC B01 D13 E15

IN BIERMANN, M; CHRISTOPHLIEMK, P; DOLHAINE, H; **FABRY**, **B**; KROPF, C; SCHROEDER, C

PA (COGN-N) COGNIS DEUT GMBH

CYC 91

PI WO 2001000046 A1 20010104 (200114)* DE 16p A23L001-30

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AU AZ BA BB BG BR BY CA CN CR CU CZ DM EE GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LV MA MD MG MK MN MW MX NO NZ PL RO RU SD SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000054052 A 20010131 (200124) A23L001-30

ADT WO 2001000046 A1 WO 2000-EP5537 20000616; AU 2000054052 A AU 2000-54052 20000616
FDT AU 2000054052 A Based on WO 200100046
PRAI US 1999-141154P 19990625
IC ICM A23L001-30
AB WO 200100046 A UPAB: 20010312
NOVELTY - Hypocholesterolemic sterols and sterol esters have improved oral resorbability when converted to nanoparticles with a diameter of 10-300 nm.
DETAILED DESCRIPTION - The use of nanoscale sterols and/or sterol esters with a particle size of 10-300 nm is claimed as food additives.
ACTIVITY - Antilipemic.
MECHANISM OF ACTION - Cholesterol antagonist.
USE - The sterols are useful as hypocholesterolemic additives for butter, margarine, diet foods, cooking and salad oils, mayonnaise, salad dressings, chocolate products or sausages (claimed).
ADVANTAGE - The particles are much finer than conventionally prepared sterol particles, resulting in improved solubility and dispersibility, and hence quicker oral resorption.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: **B01-D02**; B14-D01D; B14-F06; D03-H01; E01
TECH UPTX: 20010312
TECHNOLOGY FOCUS - FOOD - Preferred compounds include phytosterols and sitosterols, e.g. ergosterol, campesterol, stigmasterol, brassica sterols, sitosterol and sitostanol. The compositions are prepared by dissolving the sterol in an appropriate solvent, passing the resulting solution via a nozzle into a vacuum, a gas or another liquid, and simultaneously evaporating the solvent. The particles may be coated with a protective colloid, e.g. gelatin and/or chitosan.

L100 ANSWER 7 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2000-452123 [39] WPIX
CR 2000-350827 [30]
DNN N2000-336634 DNC C2000-137757
TI Identifying ligands for the farnesoid X receptor, useful as potential agents for treating e.g. atherosclerosis and obesity, comprises measuring receptor binding with co-activator peptide.
DC B03 B04 S03
IN BLANCHARD, S G; KLIEWER, S A; LEHMANN, J; PARKS, D J; STIMMEL, J B; WILLSON, T M
PA (GLAX) GLAXO GROUP LTD
CYC 91
PI WO 2000037077 A1 20000629 (200039)* EN 61p A61K031-42
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000023891 A 20000712 (200048) A61K031-42
EP 1140079 A1 20011010 (200167) EN A61K031-42
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
ADT WO 2000037077 A1 WO 1999-US30947 19991222; AU 2000023891 A AU 2000-23891 19991222; EP 1140079 A1 EP 1999-967639 19991222, WO 1999-US30947 19991222
FDT AU 2000023891 A Based on WO 200037077; EP 1140079 A1 Based on WO 200037077
PRAI US 1998-135097P 19981223
IC ICM A61K031-42
ICS C07K014-00; G01N033-53
AB WO 200037077 A UPAB: 20011119
NOVELTY - Rapid detection of ligands for the farnesoid X receptor (FXR) comprises applying test compound (I) to (i) a FXR-ligand binding domain (LBD), associated with a first marker (M1) and (ii) a nuclear receptor co-activating peptide (II), associated with a second marker (M2).

Interaction between M1 and M2 is measured to determine if (I) modifies the binding between (II) and the LBD.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) similar method as above in which (I) is treated with (i) a nuclear receptor LBD labeled with M1 and (ii) a heterodimeric partner for (i), labeled with M2, and measuring any interaction between M1 and M2 to determine if (I) modulates heterodimerization;

(b) method for identifying compounds for treating disorders modulated by FXR by identifying compounds that interact directly with FXR;

(c) compounds (L) identified by any of the new methods;

(d) compounds of formula (La), optionally labeled, that bind FXR;

X1 = CH or N;

X2 = O or NH;

R, R1 = H, lower alkyl, halo or trifluoromethyl;

R2 = lower alkyl;

R3, R4 = H, lower alkyl, halo, trifluoromethyl, hydroxy, alkoxy or polyhaloalkoxy;

(e) regulating I-BABP (intestinal bile acid binding protein) expression in a mammal by activating or inhibiting FXR;

(f) regulating the bile acid transport system in a mammal by activating FXR with a binding ligand;

(g) method for treating, in mammals, diseases affected by levels of cholesterol, triglycerides or bile acid by administering a FXR ligand;

(h) method for blocking **fatty acid** adsorption in the intestine of a mammal by administering an FXR agonist;

(j) method for blocking protein and carbohydrate digestion in the intestine of a mammal by administering an FXR agonist;

(k) method for blocking de novo cholesterol synthesis in the liver of a mammal by administering an FXR antagonist;

(l) method for blocking induction of SHP-1 expression in a mammal by administering an FXR antagonist;

(m) method for blocking SHP-1 mediated repression of CYP7A in a mammal by administering an SHP-1 antagonist;

(n) use of RXR (retinoid X receptor)-specific ligands for treating disorders modulated by FXR; and

(o) method for modulating an FXR-regulated gene by administering an FXR ligand.

ACTIVITY - Antilipemic; antiarteriosclerotic; litholytic; hepatotropic; cardiant; anorectic.

MECHANISM OF ACTION - Modulation of FXR which is involved in regulation of many genes involved in bile acid, lipid and cholesterol homeostasis, **fatty acid** absorption and digestion of proteins and carbohydrates.

USE - The ligands are used for treating FXR-related diseases, particularly those related to levels of bile acids, triglycerides and cholesterol, e.g. atherosclerosis, gall stones, lipid disorders, cardiovascular diseases and obesity.

ADVANTAGE - Ligands can be identified rapidly and simply.

Dwg.0/5

FS CPI EPI

FA AB; GI; DCN

MC CPI: **B01-D01**; **B01-D02**; B04-C01; B07-E01; B12-K04; B14-E12; B14-F07

EPI: S03-E14H4

TECH UPTX: 20000818

TECHNOLOGY FOCUS - BIOLOGY - Preferred materials: (II) is any of 5 peptides listed, e.g. CPSSHSSLTERHKILHRLLQEGSPS. Preferred markers are those conventionally used in scintillation proximity of fluorescent resonance energy transfer assays.

Preferred methods: Interaction of markers is determined by comparing signals produced by M1/M2 interaction in presence and absence of (I). In method (a), the heterodimer is RXR and in (b), interaction of the SRC-1 (LCD2 677-697) peptide with FXR is detected. In method (e), an activating amount of chenodeoxycholic acid CDCA) is bound to FXR or the activation of FXR by CDCA is inhibited. In method (f), the binding ligand is GW4064 (the

preferred (La)), CDCA, lithocholic or deoxycholic acids, or their **conjugates** with glycine or taurine. Particularly, FXR is activated by **conjugated** bile acids in tissues that express bile acid transporters, specifically terminal ileum, liver or kidney. In method (g), the ligand is an activator or inhibitor of FXR heterodimer interaction with RXR.
Preferred Process: The specification includes lists of genes that (i) are up- or down-regulated in liver by (La) or (ii) have altered expression in the intestines when treated with (La).

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: No general method for preparation of (La) is given, but in the example the preferred compound is produced by (i) reacting 2,6-dichlorobenzaldehyde oxime with N-chlorosuccinimide; (ii) reacting the hydroximic acid formed with methyl isobutyrylacetate to form 3-(2,6-dichlorophenyl)-4-methoxycarbonyl-5-isopropyl-isoxazole; (iii) reducing this to 4-hydroxymethyl then reaction with 2-chloro-4-hydroxybenzaldehyde and with diethyl (3-methoxycarbonyl)benzyl-phosphonate to produce 3-(2,6-dichlorophenyl)-4-(3'-methoxycarbonyl-2-chloro-stilben-4-yl)oxymethyl 5-isopropyl-isoxazole. Hydrolysis with lithium hydroxide gave the corresponding free acid, GW4064.

L100 ANSWER 8 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2000-420751 [36] WPIX
DNC C2000-158958
TI Phytosterol and/or phytostanol esters made from phytosterols and/or phytostanols with polyunsaturated **fatty acids**, used in human diet and diet-food to lower serum cholesterol and triglycerides levels.
DC B01 D13
IN BURDICK, D C; MOINE, G; RAEDERSTORFF, D; WEBER, P; MOINET, G
PA (HOFF) HOFFMANN LA ROCHE & CO AG F
CYC 34
PI NO 9905784 A 20000529 (200036)* C07J009-00 <--
AU 9960655 A 20000601 (200036) C07J001-00 <--
JP 2000159792 A 20000613 (200039) 10p C07J009-00 <--
BR 9905398 A 20000808 (200044) C07J075-00 <--
EP 1004594 A1 20000531 (200045) EN C07J009-00 <--
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
CN 1256277 A 20000614 (200048) C07J073-00 <--
CA 2290331 A1 20000526 (200049)B EN 21p C07J009-00 <--
KR 2000035619 A 20000626 (200111) C11B001-00
NZ 501169 A 20010525 (200132) C07J009-00 <--
MX 9910678 A1 20000901 (200139) C07J009-00 <--
ADT NO 9905784 A NO 1999-5784 19991125; AU 9960655 A AU 1999-60655 19991125; JP 2000159792 A JP 1999-330770 19991122; BR 9905398 A BR 1999-5398 19991125; EP 1004594 A1 EP 1999-122978 19991119; CN 1256277 A CN 1999-124382 19991126; CA 2290331 A1 CA 1999-2290331 19991119; KR 2000035619 A KR 1999-52052 19991123; NZ 501169 A NZ 1999-501169 19991118; MX 9910678 A1 MX 1999-10678 19991119
PRAI EP 1999-119337 19990929; EP 1998-122412 19981126
IC ICM **C07J001-00**; **C07J009-00**; **C07J073-00**; **C07J075-00**; C11B001-00
ICS A23D007-00; A23D009-00; A23D009-013; A23L001-30; A23L001-307; A61K031-56; A61K031-565; **A61K031-575**; A61K031-58; A61K031-705; A61P003-02; A61P003-04; A61P003-06; A61P007-00
AB CA 2290331 A UPAB: 20001006 ABEQ treated as Basic
NOVELTY - Phytosterol and/or phytostanol esters made from phytosterols and/or phytostanols with polyunsaturated **fatty acids** (PUFAs) containing 18-22 C atoms and at least three unsaturated C=C bonds.
ACTIVITY - Serum cholesterol lowering; serum triglyceride lowering; dietary. Male Fisher rats (n = 30; 177 plus or minus 14 g) were maintained on a high-fat diet for 2 weeks before being divided into five treatment groups. The high-fat diet contained (g/100 g anhydrous mixture): protein (18.7), fiber (6.6), fat (18.3) and carbohydrate (39.2), and had dietary

energy of 16 MJ/kg and metabolic energy in fat of 42%. The control group (1) remained on the high-fat diet. For the other experimental diets, in order to have isocaloric diets and an equal amount of fat, 2 weight/weight % of the fat content of the control diet (1% coconut oil and 1% corn oil) was replaced by 2 weight/weight % of the following: (2) 2% sitosterol mix/high oleic sunflower oil (1:1); (3) 2% sitostanol-DHA ester; (4) 2% stigmasterol-EPA ester; and (5) 2% sitosterol mix + EPA/DHA ester (1:1). The rats were allowed free access to water and diet and were maintained on a 12-hour light-dark cycle. The diet was replaced daily, all unconsumed material discarded and food intake measured. Blood samples (1 ml) were taken by retro-orbital puncture at the start of the experimental period (week 0) and after 2 weeks treatment (week 2). After 4 weeks, the animals were sacrificed by withdrawing blood from the vena cava under isoflurane anesthesia. Blood was collected into tubes containing ethylene-diaminetetra-acetic acid as anticoagulant. The lipid content of the plasma from the blood was analyzed. The growth of rats was similar in all dietary groups over the 4 weeks' feeding period. The average food intake for the 4 weeks of the five dietary regimes was 12 g/day/rat. Dietary treatment had no significant effect on body weight or food consumption. The plasma cholesterol was significantly lower by 28% to 46% in all the four groups treated with phytosterols relative to control and by 46% to 66% relative to the pre-treatment period (week 0). The high-density lipoprotein (HDL) cholesterols were almost not affected by the treatment with phytosterols; thus the non-HDL cholesterol - very low density lipoprotein (VLDL) and low-density lipoprotein (LDL) cholesterol - were mainly lowered by phytosterol treatment. The plasma triglycerides were significantly lowered by 18% to 39% in the groups treated with phytosterol combined with n-3 **fatty acids** relative to the control group and by 15% to 41% relative to the pre-treatment period (week 0), whereas phytosterol combined with vegetable oil did not significantly lower plasma triglyceride.

USE - The esters are used in human diet and diet-food to lower serum cholesterol levels and serum triglycerides levels in humans (claimed).

ADVANTAGE - The esters may be used as a combined cholesterol reduction agent and triglyceride lowering agent and thus positively affect two of the major risk factors for cardiovascular disease.

Dwg.0/0

AB NO 9905784 A UPAB: 20001010

NOVELTY - Phytosterol and/or phytostanol esters made from phytosterols and/or phytostanols with polyunsaturated **fatty acids** (PUFAs) containing 18-22 C atoms and at least three unsaturated C=C bonds.

ACTIVITY - Serum cholesterol lowering; serum triglyceride lowering; dietary. Male Fisher rats (n = 30; 177 plus or minus 14 g) were maintained on a high-fat diet for 2 weeks before being divided into five treatment groups. The high-fat diet contained (g/100 g anhydrous mixture): protein (18.7), fiber (6.6), fat (18.3) and carbohydrate (39.2), and had dietary energy of 16 MJ/kg and metabolic energy in fat of 42%. The control group (1) remained on the high-fat diet. For the other experimental diets, in order to have isocaloric diets and an equal amount of fat, 2 weight/weight % of the fat content of the control diet (1% coconut oil and 1% corn oil) was replaced by 2 weight/weight % of the following: (2) 2% sitosterol mix/high oleic sunflower oil (1:1); (3) 2% sitostanol-DHA ester; (4) 2% stigmasterol-EPA ester; and (5) 2% sitosterol mix + EPA/DHA ester (1:1). The rats were allowed free access to water and diet and were maintained on a 12-hour light-dark cycle. The diet was replaced daily, all unconsumed material discarded and food intake measured. Blood samples (1 ml) were taken by retro-orbital puncture at the start of the experimental period (week 0) and after 2 weeks treatment (week 2). After 4 weeks, the animals were sacrificed by withdrawing blood from the vena cava under isoflurane anesthesia. Blood was collected into tubes containing ethylene-diaminetetra-acetic acid as anticoagulant. The lipid content of the plasma from the blood was analyzed. The growth of rats was similar in all dietary groups over the 4 weeks' feeding period. The average food intake for the 4 weeks of the five dietary regimes was 12 g/day/rat. Dietary treatment had no significant effect on body weight or food consumption. The plasma cholesterol was significantly lower by 28% to 46% in all the four groups

treated with phytosterols relative to control and by 46% to 66% relative to the pre-treatment period (week 0). The high-density lipoprotein (HDL) cholesterols were almost not affected by the treatment with phytosterols; thus the non-HDL cholesterol - very low density lipoprotein (VLDL) and low-density lipoprotein (LDL) cholesterol - were mainly lowered by phytosterol treatment. The plasma triglycerides were significantly lowered by 18% to 39% in the groups treated with phytosterol combined with n-3 **fatty acids** relative to the control group and by 15% to 41% relative to the pre-treatment period (week 0), whereas phytosterol combined with vegetable oil did not significantly lower plasma triglyceride.

USE - The esters are used in human diet and diet-food to lower serum cholesterol levels and serum triglycerides levels in humans (claimed).

ADVANTAGE - The esters may be used as a combined cholesterol reduction agent and triglyceride lowering agent and thus positively affect two of the major risk factors for cardiovascular disease.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: **B01-D02**; B04-B01B; B10-C04E; **B14-D02A2**; B14-E11; B14-F06; B14-F07; D03-H01T

ABEQ CA 2290331 A UPAB: 20001006

NOVELTY - Phytosterol and/or phytostanol esters made from phytosterols and/or phytostanols with polyunsaturated **fatty acids** (PUFAs) containing 18-22 C atoms and at least three unsaturated C=C bonds.

ACTIVITY - Serum cholesterol lowering; serum triglyceride lowering; dietary. Male Fisher rats (n = 30; 177 plus or minus 14 g) were maintained on a high-fat diet for 2 weeks before being divided into five treatment groups. The high-fat diet contained (g/100 g anhydrous mixture): protein (18.7), fiber (6.6), fat (18.3) and carbohydrate (39.2), and had dietary energy of 16 MJ/kg and metabolic energy in fat of 42%. The control group (1) remained on the high-fat diet. For the other experimental diets, in order to have isocaloric diets and an equal amount of fat, 2 weight/weight % of the fat content of the control diet (1% coconut oil and 1% corn oil) was replaced by 2 weight/weight % of the following: (2) 2% sitosterol mix/high oleic sunflower oil (1:1); (3) 2% sitostanol-DHA ester; (4) 2% stigmasterol-EPA ester; and (5) 2% sitosterol mix + EPA/DHA ester (1:1). The rats were allowed free access to water and diet and were maintained on a 12-hour light-dark cycle. The diet was replaced daily, all unconsumed material discarded and food intake measured. Blood samples (1 ml) were taken by retro-orbital puncture at the start of the experimental period (week 0) and after 2 weeks treatment (week 2). After 4 weeks, the animals were sacrificed by withdrawing blood from the vena cava under isoflurane anesthesia. Blood was collected into tubes containing ethylene-diaminetetra-acetic acid as anticoagulant. The lipid content of the plasma from the blood was analyzed. The growth of rats was similar in all dietary groups over the 4 weeks' feeding period. The average food intake for the 4 weeks of the five dietary regimes was 12 g/day/rat. Dietary treatment had no significant effect on body weight or food consumption. The plasma cholesterol was significantly lower by 28% to 46% in all the four groups treated with phytosterols relative to control and by 46% to 66% relative to the pre-treatment period (week 0). The high-density lipoprotein (HDL) cholesterols were almost not affected by the treatment with phytosterols; thus the non-HDL cholesterol - very low density lipoprotein (VLDL) and low-density lipoprotein (LDL) cholesterol - were mainly lowered by phytosterol treatment. The plasma triglycerides were significantly lowered by 18% to 39% in the groups treated with phytosterol combined with n-3 **fatty acids** relative to the control group and by 15% to 41% relative to the pre-treatment period (week 0), whereas phytosterol combined with vegetable oil did not significantly lower plasma triglyceride.

USE - The esters are used in human diet and diet-food to lower serum cholesterol levels and serum triglycerides levels in humans (claimed).

ADVANTAGE - The esters may be used as a combined cholesterol reduction agent and triglyceride lowering agent and thus positively affect two of the major risk factors for cardiovascular disease.

Dwg.0/0
TECH UPTX: 20001114
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Compounds: The phytosterol is beta-sitosterol, stigmasterol and/or campesterol, preferably beta-sitosterol and/or stigmasterol, most preferably beta-sitosterol. The phytostanol is campestanol and/or beta-sitostanol, preferably beta-sitostanol. The polyunsaturated **fatty acid** is eicosapentaenoic acid (EPA) or docosahexaenoic (DHA) acid. The esters further comprise, in admixture, esters of phytosterol and/or phytostanol with **fatty acids** other than the above-described PUFAs and/or free phytosterols/phytostanols and/or PUFA glycerides or esters.
Preparation: The esters are obtained by interesterification of free phytosterols/phytostanols with **fatty acids** of a 18-22C n-3 polyunsaturated **fatty acid** containing at least three unsaturated C=C **double bonds** by heating in the presence of an interesterification catalyst in which
(i) the interesterification is carried out solvent free;
(ii) the fatty esters include suitable simple 1-4C esters and triglycerides; and
(iii) the catalyst is a sodium alkoxide of a 1-4C alcohol, and the reaction is conducted by heating the mixture at 80-140 degrees C at 133-6,650 Pa with a stoichiometric amount to an excess of the PUFA ester.

L100 ANSWER 9 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 2000-329067 [28] WPIX
DNC C2000-099721
TI Cosmetic or dermatological compositions containing sterols or their esters in nano-scale form for improved resorption, especially useful in skin or hair care or sunscreen compositions.
DC A14 A25 A96 B01 D21
IN **FABRY, B**; FOERSTER, T; HOLLENBROCK, M; KROPF, C
PA (COGN-N) COGNIS DEUT GMBH; (HENK) HENKEL KGAA
CYC 46
PI WO 2000021490 A1 20000420 (200028)* DE 29p A61K007-00
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU BG BR BY CA CN CZ HU ID IN IS JP KR LT LV MX NO NZ PL RO RU SI SK TR UA US ZA
AU 9963334 A 20000501 (200036) A61K007-00
EP 1121088 A1 20010808 (200146) DE A61K007-00
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO SE SI
ADT WO 2000021490 A1 WO 1999-EP7359 19991005; AU 9963334 A AU 1999-63334 19991005; EP 1121088 A1 EP 1999-950616 19991005, WO 1999-EP7359 19991005
FDT AU 9963334 A Based on WO 200021490; EP 1121088 A1 Based on WO 200021490
PRAI US 1998-104144P 19981014
IC ICM A61K007-00
ICS A61K007-06; A61K007-48; A61K009-51
AB WO 200021490 A UPAB: 20000613
NOVELTY - The use of nano-scale sterols (and/or their esters) (I), having particle diameter 10-300 nm, in the production of cosmetic and/or pharmaceutical preparations is new.
ACTIVITY - Dermatological; antiinflammatory; antipsoriatic; antimicrobial.
MECHANISM OF ACTION - Skin leukotriene level reduction.
USE - Sterols and their esters show protective and care action; promote moisturization and increase lipid levels in the skin; improve scaling behavior and reduce erythema in the skin; inhibit inflammatory reactions such as dermatitis, psoriasis and UV-erythema in the skin (by reducing leukotriene levels); improve the combability and strength of hair; and show antimicrobial activity. (I) are especially used in hair care, skin care or sunscreen preparations (all claimed). No activity example given.
ADVANTAGE - Use in nanoparticle form markedly improves and accelerates the resorption of sterols or their esters on topical administration.

Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: A05-H03; A10-E09B2; A12-V01; A12-V04A; A12-V04C; A12-W05; **B01-D02**; B03-H; B04-C03B; B04-C03C; B10-J02; B14-N17; B14-R01; B14-R02; B14-R05; D08-B03; D08-B09A; D09-E
TECH UPTX: 20000613
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: (I) are phytosterols (specifically sitosterols) or their esters. (I) are obtained in nano-scale form by dissolving the starting material in a solvent under supercritical or near-critical conditions, then depressurizing he fluid mixture via a nozzle into a vacuum, a gas or a liquid while simultaneously evaporating the solvent. The nanoparticles are encapsulated in a protective colloid.

TECHNOLOGY FOCUS - POLYMERS - Preferred Materials: The nanoparticles are encapsulated in a polyvinyl alcohol or polyethylene glycol protective colloid.

L100 ANSWER 10 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1999-633821 [54] WPIX
DNC C1999-185105
TI New bile acid or bile salt **fatty acid conjugates**, used in prevention and/or reduction of arteriosclerosis and dissolution of cholesterol gallstones in bile.
DC B01
IN GILAT, T
PA (GSTX-N) GSTX LTD; (GALM-N) GALMED INT LTD
CYC 86
PI WO 9952932 A1 19991021 (199954)* EN 44p C07J041-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9930515 A 19991101 (200013)
BR 9909908 A 20001226 (200103) C07J041-00 <--
NO 2000004998 A 20001206 (200104) C07J041-00 <--
CZ 2000003625 A3 20010117 (200107) C07J041-00 <--
EP 1071702 A1 20010131 (200108) EN C07J041-00 <--
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
CN 1296492 A 20010523 (200154) C07J041-00 <--
ADT WO 9952932 A1 WO 1999-IL173 19990325; AU 9930515 A AU 1999-30515 19990325; BR 9909908 A BR 1999-9908 19990325, WO 1999-IL173 19990325; NO 2000004998 A WO 1999-IL173 19990325, NO 2000-4998 20001004; CZ 2000003625 A3 WO 1999-IL173 19990325, CZ 2000-3625 19990325; EP 1071702 A1 EP 1999-912026 19990325, WO 1999-IL173 19990325; CN 1296492 A CN 1999-804903 19990325
FDT AU 9930515 A Based on WO 9952932; BR 9909908 A Based on WO 9952932; CZ 2000003625 A3 Based on WO 9952932; EP 1071702 A1 Based on WO 9952932
PRAI IL 1998-123998 19980408
IC ICM **C07J041-00**
ICS **A61K031-575**; A61P009-10; **C07J009-00**
AB WO 9952932 A UPAB: 19991221
NOVELTY - Bile acid or bile salt **fatty acid conjugates** (I) are new.
DETAILED DESCRIPTION - Bile acid or bile salt **fatty acid conjugates** of formula W-X-G (I) are new.
G = bile acid or bile salt radical;
W = one or two **fatty acid** radicals;
X = direct bond or a bonding group.
ACTIVITY - Litholytic; hepatotropic; antiarteriosclerotic.
MECHANISM OF ACTION - Cholesterol solubilizer; cholesterol crystallization inhibitor. A model bile containing 150 mM of sodium taurocholate, 15 mM of cholesterol, 30 mM of egg lecithin and 10.3 g/dl of

total lipids was prepared. If 20% of the sodium taurocholate was replaced by 3 beta -palmitylamido-7 alpha , 12 alpha - dihydroxy-5 beta -cholan-24-oic acid (Ia), the nucleation time of cholesterol was prolonged by 167%, cholesterol crystal growth rate was reduced by 67% and total cholesterol crystal mass after 14 days of incubation was reduced by 53%.

USE - For dissolution and prevention of formation of cholesterol gallstones in bile and for prevention and/or reduction of arteriosclerosis (claimed).

ADVANTAGE - (I) serve as vehicles for transporting **fatty acid** components of phospholipids (having strong cholesterol dissolving activity) into bile, using the efficient entero-hepatic circulation of bile acids and salts. (I) are absorbed from the intestine, taken up by the liver and secreted into bile. They show improved cholesterol solubilization in bile and markedly retard its crystallization in the vascular tree.

Dwg.0/10

FS CPI
FA AB; DCN
MC CPI: **B01-D02**; B14-F07
TECH UPTX: 19991221
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: None given.

L100 ANSWER 11 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1999-314061 [27] WPIX
DNC C1999-092951
TI Preparation of hypocholesterinemic agents.
DC B01 B05 D13
IN **FABRY, B**
PA (HENK) HENKEL KGAA; (COGN-N) COGNIS DEUT GMBH
CYC 43
PI DE 19750453 A1 19990527 (199927)* 5p A61K031-575 <--
WO 9925362 A1 19990527 (199928) DE A61K031-575 <--
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU BG BR BY CA CN CZ HU ID IS JP KR LT LV MX NO NZ PL RO RU SI SK TR UA US
AU 9915603 A 19990607 (199943) A61K031-575 <--
EP 1028733 A1 20000823 (200041) DE A61K031-575 <--
R: DE ES FR GB IT NL
AU 737638 B 20010823 (200154) A61K031-575 <--
KR 2001032057 A 20010416 (200163) A61K031-575 <--
ADT DE 19750453 A1 DE 1997-19750453 19971114; WO 9925362 A1 WO 1998-EP7059 19981105; AU 9915603 A AU 1999-15603 19981105; EP 1028733 A1 EP 1998-959848 19981105, WO 1998-EP7059 19981105; AU 737638 B AU 1999-15603 19981105; KR 2001032057 A KR 2000-705179 20000512
FDT AU 9915603 A Based on WO 9925362; EP 1028733 A1 Based on WO 9925362; AU 737638 B Previous Publ. AU 9915603, Based on WO 9925362
PRAI DE 1997-19750453 19971114
IC ICM **A61K031-575**
ICS A23L001-30; A61K031-23
AB DE 19750453 A UPAB: 19990714
NOVELTY - The preparation of a hypocholesterinemic agent (A) comprises mixing: (a) phytostenol and/or phytostenol ester; and (b) **fatty acids** with 6-24C and at least two **conjugated double bonds**, especially their glycerides.

USE - (A) is used to lower the cholesterol levels in mammal serum.

FS CPI
FA AB; DCN
MC CPI: B10-C04; B10-G02; B14-F06; D03-H01T2
TECH UPTX: 19990714
TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred materials: (a) is especially beta-sitostenol, beta-sitostanol or their esters, especially beta-sitostanol with carbonic acids of formula (I), R1COOH (I). R1CO = aliphatic, optionally linear 2-22C acyl rest with 1-3 **double bonds**. (b0 are **fatty acids** of 12-18C, especially **conjugated** linol acid. (A) is encapsulated in gelatin. (a) and (b)

make up 0.1-50 weight % of the capsule. Alternatively, the components (a) and (b0 are added to food stuffs such as butter, margarine, diet food, frying oils, mayonnaise, salad dressings, cacao products, sausages and similar products.

L100 ANSWER 12 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1999-253941 [21] WPIX
CR 2000-258608 [16]; 2000-258609 [23]
DNC C1999-074233
TI Preparation of stanol esters and sterol esters used in foods e.g. baking products.
DC B01 D13
IN HIGGINS, J D; BOYER, M H; BRUCE, R; DETRAINO, F; RODEN, A; WILLIAMS, J L; DETRANO, F; HIGGINGS, J D
PA (MCNI) MCNEIL-PPC INC; (JOHJ) JOHNSON & JOHNSON
CYC 7
PI

US 5892068	A	19990406 (199921)*	4p	C07J009-00	<--
AU 9913166	A	20000309 (200022)		C07J063-00	<--
BR 9900280	A	20000502 (200033)		C07C067-60	
HU 9900163	A2	20000728 (200045)		C07J009-00	<--
ZA 9900368	A	20000927 (200050)	21p	C07J000-00	<--
KR 2000016828	A	20000325 (200104)		C07C401-00	
ZA 9905418	A	20010425 (200128)	24p	C07J000-00	<--
MX 9907839	A1	20000901 (200139)		C07J009-00	<--

ADT US 5892068 A US 1998-139460 19980825; AU 9913166 A AU 1999-13166 19990119; BR 9900280 A BR 1999-280 19990202; HU 9900163 A2 HU 1999-163 19990125; ZA 9900368 A ZA 1999-368 19990119; KR 2000016828 A KR 1999-3727 19990204; ZA 9905418 A ZA 1999-5418 19990824; MX 9907839 A1 MX 1999-7839 19990824
PRAI US 1998-139460 19980825; US 1998-211978 19981215; US 1999-336773 19990621
IC ICM C07C067-60; C07C401-00; **C07J000-00**; **C07J009-00**; **C07J063-00**
ICS A61K031-375
AB US 5892068 A UPAB: 20010522
NOVELTY - Direct esterification of stanols and sterols with **fatty acids** uses an acid catalyst.
DETAILED DESCRIPTION - Production of stanol esters and sterol esters of comprises reacting a stanol or sterol derivative of formula (II) and a **fatty acid** of formula CH3(CH2)nCO2H (III) in the presence of a mild acidic catalyst.
n = 4-20.
a = single or **double bond**.
ACTIVITY - Cardiant
MECHANISM OF ACTION - Sterols reduce serum cholesterol by disrupting intestinal absorption of dietary cholesterol by displacing it from bile acid micelli.
USE - Plant sterols are known to be useful for reducing serum cholesterol levels. The stanol/sterol-esters are useful in baking products, preferably in the manufacture of soft gel dosage forms or for incorporation in salad dressings or yoghurts.
ADVANTAGE - The process is amenable to large scale production of the esters in high yields and preferably is food grade, being free of organic solvents or mineral acids. The process is highly efficient. The method provides a process enabling rational design of discrete stanol/sterol esters with various physical and biological properties. Prior art free sterols are not optimum candidates for use in pharmaceutical and dietary dosage forms as cholesterol reducing agents because of their insolubility in the micelli phase of the alimentary canal and limited solubility in oils and/or fats or water.
Dwg.0/0
FS CPI
FA AB; GI; DCN
MC CPI: B04-J01; B14-F06; D03-H; D03-H01H; D03-H01J
TECH UPTX: 19990603
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Method: The reaction is conducted neat, with (III) acting as the solvent. The yield of (I) is not

less than 98 weight % and the reaction is run under vacuum. (I) is isolated in a completely aqueous process.
INORGANIC CHEMISTRY
Preferred Catalyst: The mild acid catalyst is sodium hydrogen sulfate.

L100 ANSWER 13 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1998-596229 [51] WPIX
DNC C1998-179062
TI Use of esters of phyto-sterols - with long chain carbon **fatty acids** and at least two **conjugated double bonds**, in preparation of hypocholesterolaemic substances.
DC B01
IN **FABRY, B**
PA (HENK) HENKEL KGAA; (COGN-N) COGNIS DEUT GMBH
CYC 43
PI DE 19750422 C1 19981126 (199851)* 5p C07J009-00 <--
WO 9925361 A1 19990527 (199928) DE A61K031-575 <--
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU BG BR BY CA CN CZ HU ID IS JP KR LT LV MX NO NZ PL RO RU SG SI TR UA US
AU 9915602 A 19990607 (199943) A61K031-575 <--
EP 1028732 A1 20000823 (200041) DE A61K031-575 <--
R: DE ES FR GB IT NL
AU 737048 B 20010809 (200152) A61K031-575 <--
KR 2001032058 A 20010416 (200163) A61K031-575 <--
ADT DE 19750422 C1 DE 1997-19750422 19971114; WO 9925361 A1 **WO 1998-EP7057 19981105**; AU 9915602 A AU 1999-15602 19981105; EP 1028732 A1 EP 1998-959847 19981105, **WO 1998-EP7057 19981105**; AU 737048 B AU 1999-15602 19981105; KR 2001032058 A KR 2000-705180 20000512
FDT AU 9915602 A Based on WO 9925361; EP 1028732 A1 Based on WO 9925361; AU 737048 B Previous Publ. AU 9915602, Based on WO 9925361
PRAI DE 1997-19750422 19971114
IC ICM **A61K031-575; C07J009-00**
ICS A61K031-70; A61K031-715; A61K031-73
AB DE 19750422 C UPAB: 19981223
Use of esters from phytosterols with 6-24C **fatty acids** and at least 2 **conjugated double bonds**, in the preparation of hypocholesterolaemic substances is new.
USE - The phytosterol esters are used to lower the cholesterol serum levels in mammals.
ADVANTAGE - The composition provides phytosterol esters at higher concentrations than normally found in foodstuffs.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: **B01-D02; B14-D02A2**

L100 ANSWER 14 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1998-313690 [28] WPIX
DNC C1998-096807
TI Phytosterol (ester) based hypocholesterolaemic agent - containing potentiating agent, e.g. tocopherol, chitosan or DNA, to accelerate serum cholesterol lowering effect.
DC B05
IN **FABRY, B**; WEITKEMPER, N
PA (HENK) HENKEL KGAA
CYC 33
PI DE 19700796 A1 19980604 (199828)* 6p A61K031-575 <--
WO 9823275 A1 19980604 (199828) DE A61K031-575 <--
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU BR CA CN CZ HU JP KR MX NO NZ PL RU SI SK US
WO 9823277 A1 19980604 (199828) DE A61K031-70
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU BR CA CN CZ HU JP KR MX NO NZ PL RU SI SK US
AU 9853229 A 19980622 (199844) A61K031-575 <--
AU 9855531 A 19980622 (199844) A61K031-70

DE 19700796 C2 19981112 (199849) A61K031-575 <--
NO 9902562 A 19990527 (199936) A61K000-00
NO 9902564 A 19990527 (199936) A61K000-00
EP 941097 A1 19990915 (199942) DE A61K031-575 <--
R: BE DE DK ES FI FR GB IT NL SE
EP 952837 A1 19991103 (199951) DE A61K031-70
R: BE DE DK ES FI FR GB IT NL SE
AU 713665 B 19991209 (200009) A61K031-575 <--
AU 714993 B 20000113 (200014) A61K031-70
NZ 335974 A 20000623 (200038) A61K031-355
NZ 335990 A 20001027 (200062) A61K031-73
JP 2001504505 W 20010403 (200126) 14p A61K031-575 <--
JP 2001508046 W 20010619 (200140) 15p A61K031-575 <--

ADT DE 19700796 A1 DE 1997-19700796 19970113; WO 9823275 A1 WO 1997-EP6447 19971119; WO 9823277 A1 WO 1997-EP6450 19971119; AU 9853229 A AU 1998-53229 19971119; AU 9855531 A AU 1998-55531 19971119; DE 19700796 C2 DE 1997-19700796 19970113; NO 9902562 A WO 1997-EP6450 19971119, NO 1999-2562 19990527; NO 9902564 A WO 1997-EP6447 19971119, NO 1999-2564 19990527; EP 941097 A1 EP 1997-950201 19971119, WO 1997-EP6447 19971119; EP 952837 A1 EP 1997-951916 19971119, WO 1997-EP6450 19971119; AU 713665 B AU 1998-53229 19971119; AU 714993 B AU 1998-55531 19971119; NZ 335974 A NZ 1997-335974 19971119, WO 1997-EP6447 19971119; NZ 335990 A NZ 1997-335990 19971119, WO 1997-EP6450 19971119; JP 2001504505 W WO 1997-EP6447 19971119, JP 1998-524239 19971119; JP 2001508046 W WO 1997-EP6450 19971119, JP 1998-524240 19971119

FDT AU 9853229 A Based on WO 9823275; AU 9855531 A Based on WO 9823277; EP 941097 A1 Based on WO 9823275; EP 952837 A1 Based on WO 9823277; AU 713665 B Previous Publ. AU 9853229, Based on WO 9823275; AU 714993 B Previous Publ. AU 9855531, Based on WO 9823277; NZ 335974 A Based on WO 9823275; NZ 335990 A Based on WO 9823277; JP 2001504505 W Based on WO 9823275; JP 2001508046 W Based on WO 9823277

PRAI DE 1996-19649286 19961128

IC ICM A61K000-00; A61K031-355; **A61K031-575**; A61K031-70; A61K031-73
ICS A61K009-48; A61K031-7105; A61K031-722; A61K047-28; A61K047-30; A61K047-36; A61P003-06; A61P043-00

ICI A61K031-575, A61K031:355; A61K031-575, A61K031:355

AB DE 19700796 A UPAB: 19980715
Use of an active agent mixture (I) for the preparation of hypocholesterolaemic agents, is new.

(I) comprises (A) phytosterols and/or phytosterol esters and (B) potentiating agents selected from tocopherols, chitosans, phytosterol sulphates and/or (deoxy)ribonucleic acids.

Also claimed is the use of gelatin for encapsulating (A) or (I).

USE - (I) is preferably administered orally in gelatin capsules, but may also be used in rectal or vaginal suppositories or dissolved or dispersed in foodstuffs.

ADVANTAGE - (B) (which themselves have no hypocholesterolaemic activity) potentiate and accelerate the action of (A) in reducing serum cholesterol levels.

Encapsulation of (I) or (A) in gelatin allows oral administration without prior art problems of taste and/or consistency.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: **B01-D02**; B03-H; B04-C02E3; B04-E02; B04-N02; B14-F06

L100 ANSWER 15 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1996-371371 [37] WPIX

DNC C1996-117869

TI Sitosterol and acyl-glycerol-based complexes contg. bio-catalytic metal - for the treatment of metabolic or auto-immune disorders e.g. diabetes and its cardiovascular complications.

DC B01

IN CHAPUIS, J M; MAUREL, J C; MONGOLD, J J; SAENZ, C; CHAPUIS, J; MAUREL, J; MONGOLD, J

PA (MAUR-N) MAUREL SANTE EURL; (MAUR-N) MAUREL SANTE
CYC 70
PI WO 9623811 A1 19960808 (199637)* FR 38p C07J051-00 <--
RW: AT BE CH DE DK EA ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN
FR 2729956 A1 19960802 (199638) 25p C07F009-00
FR 2729957 A1 19960802 (199638) 27p C07F009-00
AU 9646670 A 19960821 (199648) C07J051-00 <--
ADT WO 9623811 A1 WO 1996-FR153 19960130; FR 2729956 A1 FR 1995-1084 19950131; FR 2729957 A1 FR 1995-10333 19950904; AU 9646670 A AU 1996-46670 19960130
FDT AU 9646670 A Based on WO 9623811
PRAI FR 1995-10333 19950904; FR 1995-1084 19950131
IC ICM C07F009-00; **C07J051-00**
ICS **A61K031-575**; C07F003-06
ICA C07C013-28; C07C031-28; C07C035-14; C07C069-58
ICI C07M001:
AB WO 9623811 A UPAB: 19960918
New organometallic complexes are obtd. by the reacting: (i) a metallic cation (M) in an oxidn. state of at least 2, used as a biocatalyst in living metabolisms; (ii) free beta- and/or gamma-sitosterol or plant extracts contg. them; and (iii) a mono-, di- or tri-glyceride of formula R2O-CH(CH2OR3)(CH2OR1) (I). R1 = 14-24C **fatty acid** acyl residue (opt. unsatd.), H, or a mono- di- or tri-galactose or glucose; R2 =C18 acyl contg. one **double bond**, pref. an oleic acid or one of its **double bond** isomers (cis-6, 7, 9, 11, 12 or 13) or one of its iso-branched isomers; R3 = 14-24C acyl (opt. unsatd.) or H. Also claimed is a dietary prod. for glucidic metabolism regulation and/or cardiovascular protection comprising vegetable oil contg. at least 60 wt.% oleic acid w.r.t. **fatty acid** content, beta- and/or gamma- sitosterol or a plant extract contg. them and a salt of the aforementioned metal M.
USE - The complex is used to transport biocatalytic metallic cations and is used to regulate or stimulate biocatalytic systems, partic. in treating or preventing deficiencies or disorders (genetic or acquired) of enzymatic systems requiring cationic biocatalytic metals, e.g. metabolic, autoimmune and neoplastic diseases. Complexes in which M is vanadium, niobium, selenium, chromium, zinc or molybdenum are useful in treating or preventing diabetes and/or insulino-resistance, as well as their related cardiovascular complications such as arterial hypertension, obstructive coronaropathies such as myocardial infarction and angina, ocular and peripheral microangiopathies, hypercholesterolaemia, hypertriglyceridaemia and android-type obesity (all claimed).
ADVANTAGE - The complexes optimise metallic cation bioavailability, minimising its toxicity. When a mixt. of zinc and vanadium complexes are used, a synergistic effect in the treatment of diabetes is observed.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: **B01-D02**; B05-A01B; B05-A03; B10-E04C; B14-E12; B14-F01; B14-F01D; B14-F02B; B14-F06; B14-G02D; B14-H01B; B14-S04

L100 ANSWER 16 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1991-209233 [29] WPIX
DNC C1991-090756
TI New lipid-selective pharmaceutical antioxidants - for prophylaxis and treatment of conditions where (e.g. radical) oxidn. plays a roleransducer.
DC B05
IN SEIFFGE, D; WEITHMANN, K; WESS, G; WEITHMANN, K U
PA (FARH) HOECHST AG
CYC 10
PI DE 4000397 A 19910711 (199129)*
EP 436936 A 19910717 (199129)
NO 9100075 A 19910710 (199137)

CA 2033755	A	19910710 (199138)			
AU 9169217	A	19910905 (199143)			
PT 96438	A	19911015 (199146)			
ZA 9100132	A	19911030 (199149)			
HU 58757	T	19920330 (199217)			
JP 04331284	A	19921119 (199301)	33p	C09K015-04	
NZ 236709	A	19921125 (199305)		C07C039-11	
US 5318987	A	19940607 (199422)	28p	A61K031-35	
AU 9461892	A	19940721 (199432)		A61K031-58	
AU 652928	B	19940915 (199438)		C07C235-50	
EP 436936	A3	19940427 (199523)			
AU 660248	B	19950615 (199532)		C07D307-62	
HU 210905	B	19950928 (199545)		C07J009-00	<--
US 5508275	A	19960416 (199621)	31p	A61K031-56	

ADT DE 4000397 A DE 1990-4125641 19901228; ZA 9100132 A ZA 1991-132 19910108; JP 04331284 A JP 1991-59813 19910108; NZ 236709 A NZ 1991-236709 19910107; US 5318987 A US 1991-638321 19910107; AU 9461892 A Div ex AU 1991-69217 19910108, AU 1994-61892 19940504; AU 652928 B AU 1991-69217 19910108; EP 436936 A3 EP 1990-125641 19901228; AU 660248 B Div ex AU 1991-69217 19910108, AU 1994-61892 19940504; HU 210905 B HU 1991-28 19910107; US 5508275 A Div ex US 1991-638321 19910107, US 1994-212863 19940315

FDT AU 652928 B Previous Publ. AU 9169217; AU 660248 B Previous Publ. AU 9461892; HU 210905 B Previous Publ. HU 58757; US 5508275 A Div ex US 5318987

PRAI DE 1990-4125641 19901228; DE 1990-4000397 19900109

REP 10Jnl.Ref; EP 339486; JP 45011143; US 3910888; US 4157984; US 4232122; WO 8002027

IC ICM A61K031-35; A61K031-56; A61K031-58; C07C039-11; C07C235-50; C07D307-62; **C07J009-00**; C09K015-04

ICS A23L003-34; A23L003-3436; A23L003-349; A23L003-3544; A61K031-00; A61K031-05; A61K031-08; A61K031-10; A61K031-12; A61K031-165; A61K031-22; A61K031-23; A61K031-335; A61K031-34; A61K031-375; A61K031-385; A61K031-57; **A61K031-575**; A61K031-585; A61K031-66; A61K038-38; A61K047-00; C07C043-13; C07C043-178; C07C049-217; C07C049-835; C07C059-11; C07C059-52; C07C061-22; C07C062-34; **C07C069-157**; C07C069-612; C07C069-618; C07C069-732; C07C069-738; C07C069-88; C07C323-12; C07C323-41; C07C323-51; C07C323-52; C07C323-56; C07C323-60; C07D307-33; C07D311-04; C07D311-58; C07D311-66; C07D311-72; C07D319-06; C07D339-00; C07D339-04; C07D339-08; C07D407-12; C07F009-11; C07F009-113; C07F009-117; C07F009-40; C07J017-00; C07J031-00; C07J033-00; C07J041-00; C08L091-00; C09K015-00; C09K015-08; C09K015-14; C09K015-24; C11B005-00

AB DE 4000397 A UPAB: 19950804

Cpds. of formula (A)aL(X)s (I) are new: a and x = 1 or 2; A = an antioxidant component selected from A1-A5; A1 = chroman gp. of formula (II): where Q = a free bond; A2 = an alkyl-substd. phenol gp. of formula (III): where m and n = 1 or 2; m+n = 3 or 4; R1 = alkyl and/or alkoxy, provided that (R1)n contains up to 8 C atoms; A3 = reductone gp. of formula (IV) or (V): where R2 = H R3 = H, CH2OR4; R4 = H or lower alkyl; R4 = 2-6C, 1, 2-dithiacycloalkyl opt. in reduced dithiol form; A5 = an ascorbic acid gp. of formula (VI): where E=O, S or NR9; R5 = H, EH, EQ or Q; R6 = H, EH, ELX1 or LX1; R7 = H, EH, EQ, Q1, A2 or A3; R8 = H, EH, LX1 or PO(OR9)2; R9 = H, lower alkyl or Q; provided that only 1 or 2 of R5-R9 are or contain Q; L = a linking gp comprising one or more members selected from CR10R11, CO, C(R12)OR10, O, S, NR10 and PO(OR10), where R10-R12 = H, lower alkyl or Q1 and R11 may also be COR10 or COOR10, provided that any two of O, S and/or NR10 are sepd. by at least one C or P atom; X = a lipophilic gp. selected from X1 and X2; X1 = a cholane-typ. gp. of formula (VII): where R3=s-Bu, R11 or Q; G=O, S, NR10 (alpha, beta-OH, H) or (alpha, beta-Q, H); and the dotted lines denote an opt. bond in the 4, 5, 5, 6 or 7, 8 posn.; X2 = 1-24C alkyl, 3-24C cycloalkyl or the residue of a 1-24C **fatty acid** deriv.

USE - (I) are lipid-selective antioxidants useful as (a) stabilisers for fats, oils, polymers and rubber, e.g. in the food, cosmetic etc.. @(60pp)@

FS CPI
FA AB; DCN
MC CPI: **B01-C09**; **B01-D02**; B05-B01E; B05-B01G; B06-A01; B07-A01; B10-C04; B10-E02; B10-E04; B12-C10; B12-D03; B12-D07; B12-D09; B12-F01B; B12-G04A; B12-H02; **B12-H03**; B12-L02; B12-M06

ABEQ US 5318987 A UPAB: 19940722

Antioxidants of formula (A)a(L)(X)a (I) are new where a and a' are each 1 or 2; A is an antioxidative component, A1 is a chroman partial structure of vitamin E of formula (I); L is CR10R11, CO, C(OR10)R12, O, S, NR10 or P(=O)(OR10) R10-R12 are each H, lower alkyl or Q; or R11 is CO2R10; a is 1 or 2, two radicals selected from O, S or NR10 are sepd. by at least one C or P; X is a lipophilic component; X1 is a cholane deriv. of formula (II); R13 is sec. C4H9; E is O, S, NR10 alpha, betaOH, H or alpha beta Q,H. A **double bond** can be present in 4,5, 5,6 or 7,8 position and Q is a free valency.

USE - For protection of lipid-contg. substances against oxidation and in pharmaceuticals for treating and preventing diseases in which bioradicals are involved in partic. coronary, circulatory and vascular diseases.

Dwg.0/0

ABEQ US 5508275 A UPAB: 19960529

A compound of the formula (A)a(L)(X)a' (I) in which a and a' independently of one another are 1 or 2,

A is an antioxidative component selected from the group consisting of

A2 is an alkyl-substituted mono-, di- or triphenol radical (i)

in which

m is 1 or 2,

n is 1 or 2, and

m+n is 3 or 4,

R1 is the same or different and is an alkyl radical or an alkoxy radical and the total number of carbon atoms of the alkyl and alkoxy radicals is a maximum of 8,

A3 is a reductone radical (ii) or (iii)

in which

R2 is H or a lower alkyl radical and

R3 is H, COOR4 or CH2OR4

in which

R4 is H or a lower alkyl radical,

A4 is a 1,2-dithia-cycloalkyl or 1,2-dithiacycloalkenyl radical having 2-6 carbon atoms in the ring or the dithiol form of these radicals which has been reduced by hydrogenation, and

A5 is an ascorbic acid radical (iv) or derivative thereof in which E is O, S or NR9

R5 is H, EH, EQ or Q

R6 is H, EH, EQ-(L-X1) or Q-(L-X1)

R7 is H, EH, EQ, Q or one of the radicals defined above as A2 or A3,

R8 is H, EH, Q-(L-X1) or -PO(OR9)2,

R9 is a lower alkyl radical or Q,

and only one or two of the radicals R5-R9 are identical to Q or contain Q,

L is a bridging member as defined below and

X1 is a lipophilic component as defined below;

L is a bridging member composed of one or more of the building blocks of the following formulae C(R10)(R11), C(=O), C(OR10)(R12), O, S, NR10 and P(=O)(OR10), in which

R10, R11 and R12 are H, a lower alkyl radical or Q, or in which

R11 is -COaR10 wherein a is 1 or 2,

and 2 radicals selected from the group consisting of -O-, -S- and -NR10- are separated from one another by at least one carbon or phosphorus atom; and

X is a lipophilic component selected from the group consisting of

X1 is a cholane derivative radical, of the following formula (v)

in which

R13 is sec.-C4H9, R11 as defined in L or Q,

E is O, S, NR10 as defined in L, alpha,beta-OH, H or alpha,beta-Q, H

and a double bond can be present in the 4,5- or 5,6- or 7,8-position, and X2 is an alkyl or cycloalkyl radical or a fatty acid derivative radical having up to 24 carbon atoms and Q in all the above formulae represents a free valency (covalent single bond).
Dwg.0/0

L100 ANSWER 17 OF 17 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN 1990-132100 [17] WPIX
DNC C1990-058011
TI Side-chain amino-substd. sterol(s), esp. 26-amino cholesterol - are useful for reducing rate of cholesterol synthesis and accumulation and regulating serum cholesterol levels.
DC B01
IN EMILY, M; JAVITT, N B; WILSON, S R
PA (UYNY) UNIV NEW YORK STATE
CYC 13
PI WO 9003171 A 19900405 (199017)*
RW: AT BE CH DE FR GB IT LU NL SE
W: JP
US 4939134 A 19900703 (199029)
EP 393180 A 19901024 (199043)
R: AT BE CH DE FR GB IT LI LU NL SE
JP 03501492 W 19910404 (199119)
EP 393180 B1 19931215 (199350) EN 13p A61K031-56
R: AT BE CH DE FR GB IT LI LU NL SE
DE 68911509 E 19940127 (199405) A61K031-56
EP 393180 A4 19910508 (199516)
ADT US 4939134 A US 1988-246444 19880919; EP 393180 A EP 1989-911185 19890919; JP 03501492 W JP 1989-510442 19890919; EP 393180 B1 EP 1989-911185 19890919, WO 1989-US4094 19890919; DE 68911509 E DE 1989-611509 19890919, EP 1989-911185 19890919, WO 1989-US4094 19890919; EP 393180 A4 EP 1989-911185
FDT EP 393180 B1 Based on WO 9003171; DE 68911509 E Based on EP 393180, Based on WO 9003171
PRAI US 1988-246444 19880919
REP US 3156619; US 3291690; US 4426688; 2.Jnl.Ref; GB 1456594; US 3859437; US 4427668
IC A61K031-56; **C07J009-00**
AB WO 9003171 A UPAB: 19930928
Reducing the rate of cholesterol synthesis in humans comprises administering a sterol of formula (I), where C5-C6 is opt. unsatd.; R1 = 3-OH or 3-CO; (sic) (also H, see disclosure). R2 = OH or CO; at least one of R3-R5 = NH2 and the others are H or NH2.
USE/ADVANTAGE - (I) or its **fatty acid** ester, sulphate, carbonate or glucuronide is also useful for reducing the rate of cholesterol accumulation in body tissue, for treating atheroxleresis by reducing the rate of arterial cholesterol accumulation, and for regulating serum cholesterol levels and preventing excessive cholesterol accumulation in body tissues, when used at a dose of 1-25 mg/kg. For treating atherosclerosis, pref. (I) is used at 1-5 mg/kg. For reducing the rate of cholesterol synthesis, pref. 25-amino or 27-aminocholesterol, 27-nor-25-amino-cholesterol, 25-aminocholesta-4,6-dien-3-one, 25-aminocholesto-4-ene-3-one, 25-amino-cholesta-3,5-dien-7-one, and esp. 26-aminocholesterol or its pharmaceutically acceptable ester, ether or salt is used, pref. at 1-5 mg/kg. For treating atherosclerosis and regulating serum cholesterol levels, pref. 26-aminocholesterol is used at 1-5 mg/kg.
0/0
FS CPI
FA AB; DCN
MC CPI: **B01-D02; B12-H03**
ABEQ US 4939134 A UPAB: 19930928
Method of reducing the rate of cholesterol synthesis by human tissue cells comprises administration of a sterol of formula (I). The dotted line represents an opt. **double bond**. R1 = a 3-OH or 3-keto gp. R2 = H, OH or keto. At least 1 of R3-R5 = NH2 and the others are H or

NH2.

Pref. 1-25 mg/kg of (I) is administered. Treatment of atherosclerosis using (I) is also claimed.

ADVANTAGE - The cpds. do not affect liver cells as they very rapidly metabolised on reaching the liver.

ABEQ EP 393180 B UPAB: 19940203

A pharmaceutical composition comprising a substituted or unsubstituted sterol of the formula (I) wherein the carbon atoms at positions 5 and 6 of the sterol are one of saturated and unsaturated, R1 is one of a 3-hydroxyl group and a 3-keto group; R2 is one of a hydrogen, a hydroxyl group and a keto group, and wherein at least one of R3, R4 and R5 is an amino group and the others are each selected from hydrogen or an amino group, or sterols selected from 25-amino-cholesta-4,6-dien-3-one, 25-amino-cholest-4-en-3-one, and 25-amino-cholesta-3, 5-dien-7-one, or a **fatty acid** ester, a sulphate, a carbonate or a glucoronide thereof.

Dwg.0/0

=> d his

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     (FILE 'HOME' ENTERED AT 07:38:42 ON 20 NOV 2001)
               SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 07:38:55 ON 20 NOV 2001

     FILE 'REGISTRY' ENTERED AT 07:38:58 ON 20 NOV 2001
               E CHOLESTEROL/CN

     FILE 'HCAPLUS' ENTERED AT 07:38:59 ON 20 NOV 2001
               S E3

     FILE 'REGISTRY' ENTERED AT 07:39:01 ON 20 NOV 2001
L1             1 S E3/CN

     FILE 'HCAPLUS' ENTERED AT 07:39:02 ON 20 NOV 2001
L2         75044 S L1
L3        119556 S CHOLESTEROL
L4        137146 S ?CHOLESTER?
               E ANTICHOLESTER/CT
               E E5+ALL
L5          7518 S E3,E4,E2+NT
               E FABRY B/AU
L6           237 S E3,E7
               E COGNIS/PA,CS
L7           520 S E3,E4
L8             7 S L2-L5 AND L6,L7
L9             5 S L8 AND (?PHYTO? OR FATTY ACID)
L10            4 S L8 AND (?STENOL? OR ?STANOL?)
L11            5 S L9,L10
L12            6 S L8 AND STEROL
L13            4 S L11 AND L12
L14            5 S L11,L13
L15            4 S L14 NOT 46/SC
L16            0 S BETA  () ?SITOSTENOL?
L17          107 S BETA  () ?SITOSTANOL?
L18         8352 S BETA  () ?SITOSTEROL?

     FILE 'REGISTRY' ENTERED AT 07:49:11 ON 20 NOV 2001
L19            1 S 83-46-5
L20            1 S 83-45-4
L21            2 S L19,L20
               SEL RN
L22           55 S E1-E2/CRN

     FILE 'HCAPLUS' ENTERED AT 07:51:29 ON 20 NOV 2001
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L23        9103 S L21
L24       11039 S L17,L18,L23
L25         109 S L24 AND L5
L26        3285 S L24 AND L2-L4
L27         109 S L25 AND L26
                E FATTY ACIDS/CT
                E E3_ALL
                E FATTY ACIDS/CT
                E E3+ALL
L28      264426 S E6+NT
L29          21 S L28 AND L27
L30         871 S L28 AND L26
L31           4 S L15 AND L23,L24
L32           4 S L31 AND L26,L27,L28
                SEL RN

     FILE 'REGISTRY' ENTERED AT 07:56:02 ON 20 NOV 2001
L33          14 S E1-E14
L34           2 S L33 AND C18H32O2
L35           9 S L33 AND 4/NR
L36           7 S L35 NOT L21
L37           6 S L36 NOT L1

     FILE 'HCAPLUS' ENTERED AT 07:58:35 ON 20 NOV 2001
L38          52 S L37
L39           6 S L38 AND L5
L40          24 S L38 AND L2-L4
L41           6 S L39 AND L40
L42          24 S L29,L32,L41
L43         384 S L5 AND L28
L44          16 S L43 AND ?PHYTO?
L45           2 S L43 AND ?STENOL
L46          29 S L42,L44,L45
L47          17 S L46 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L48          18 S L32,L47
L49       33543 S L23,L24 OR ?STENOL OR STEROL
L50        6327 S L49 AND L28
L51        7383 S L49 AND FATTY ACID
L52         118 S L50,L51 AND ?CONJUGAT?
L53           3 S L52 AND L5
L54          19 S L48,L53
                SEL HIT RN
L55        1376 S L34 AND L49
L56           6 S L55 AND L5
L57           4 S L54 AND L56
L58          19 S L54,L57
L59           2 S L56 NOT L58
L60           8 S L58 AND (CHIMPANZEES OR STEINER? OR BLENDS OR EGGS OR FISH OR
                SEL DN 5-8
L61           4 S L60 NOT E33-E36
L62           4 S L60 NOT L61
L63          15 S L58 NOT L62
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 08:12:17 ON 20 NOV 2001
L64          18 S E37-E54

     FILE 'REGISTRY' ENTERED AT 08:12:33 ON 20 NOV 2001

     FILE 'HCAPLUS' ENTERED AT 08:12:48 ON 20 NOV 2001

     FILE 'MEDLINE' ENTERED AT 08:13:17 ON 20 NOV 2001
L65          65 S L21
L66         642 S L16-L18
L67           0 S L37
L68          76 S STIGMASTANOL
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                E PHYTOSTEROLS+ALL/CT
L69          2329 S E19+NT
L70          2658 S L65-L69
L71           308 S L34
                E FATTY ACIDS+ALL/CT
L72             1 S L70 AND L71
L73           339 S L70 AND E11+NT
L74           269 S L70 AND FATTY ACID
L75           352 S L73,L74 AND PY<=1998
L76           114 S L75 AND L1
L77           153 S L75 AND ?CHOLESTER?
L78           153 S L76,L77
                E ANTICHOLESTEROL/CT
                E E5+ALL
L79             0 S L78 AND E2+NT
                E HYPERCHOLESTEROL/CT
                E E4+ALL
L80            30 S L78 AND E4+NT
L81             1 S L75 AND ?CONJUGAT?
L82            39 S LINOL? AND L75
L83            28 S L80 NOT L81,L82
                SEL DN 1
L84             1 S L83 AND E1-E2
L85             2 S L72,L84

     FILE 'MEDLINE' ENTERED AT 08:25:11 ON 20 NOV 2001

     FILE 'WPIX' ENTERED AT 08:25:23 ON 20 NOV 2001
                E WO98-EP7057/AP,PRN
L86             1 S E3
                E FABRY B/AU
L87           225 S E3
L88         19289 S (B01-? OR C01-?)/MC
L89          6538 S C07J/IC,ICM,ICS
L90           641 S A61K031-575/IC,ICM,ICS
L91         21032 S L88-L90
L92             5 S L91 AND L87
L93           683 S L91 AND P814/M0,M1,M2,M3,M4,M5,M6
L94          1006 S L91 AND (B12-H03 OR C12-H03 OR B14-D02A2 OR C14-D02A2)/MC
L95          1331 S L93,L94
L96            46 S L95 AND ?CONJUGAT?
L97             8 S L96 AND FATTY ACID
L98            70 S L95 AND FATTY ACID
L99             8 S L98 AND DOUBLE BOND?
L100           17 S L86,L92,L97,L99
L101           38 S L96 NOT L100

     FILE 'WPIX' ENTERED AT 08:38:38 ON 20 NOV 2001
                E R00179+ALL/DCN
                E R03882+ALL/DCN
                E R00498+ALL/DCN
                E R04912+ALL/DCN
                E R0148+ALL/DCN
                E R00148+ALL/DCN
                E R11100+ALL/DCN
                SET COST ON

=> d his l102-

     (FILE 'WPIX' ENTERED AT 08:25:23 ON 20 NOV 2001)

     FILE 'WPIX' ENTERED AT 08:38:38 ON 20 NOV 2001
                E R00179+ALL/DCN
                E R03882+ALL/DCN
                E R00498+ALL/DCN
                E R04912+ALL/DCN
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                E R0148+ALL/DCN
                E R00148+ALL/DCN
                E R11100+ALL/DCN
                SET COST ON
L102        146 S L91 AND LINOL?
L103         19 S L102 AND L95
L104         15 S L103 NOT L100,L101
                E LINOLEIC ACID/DCN
                E E3+ALL
L105        740 S E2 OR 2026/DRN
L106          6 S E6
L107        218 S E8
L108          7 S E10
L109        343 S E14
L110        759 S 1269/DRN
L111        144 S E16
L112        125 S E18
L113          4 S L95 AND L105-L112 NOT L100,L101
L114         16 S L104,L113
                SEL DN AN 6 7 8 14 15 16
L115          6 S L114 AND E1-E9

=> d all abeq tech tot

L115 ANSWER 1 OF 6  WPIX   COPYRIGHT 2001   DERWENT INFORMATION LTD
AN   1994-219685 [27]   WPIX
DNC  C1994-099833
TI   Use of compsn. contg. new cholesteryl ester(s) of unsatd. fatty acids -
     for treating e.g. cancer, cardiovascular disease, diabetic complications,
     inflammatory disorders, cerebral and psychiatric disorders.
DC   B01
IN   HORROBIN, D F
PA   (SCOT-N) SCOTIA HOLDINGS PLC
CYC  26
PI   EP 606012     A1 19940713 (199427)* EN   11p    A61K031-565
        R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
     NO 9400035    A  19940707 (199430)              A61K031-575     <--
     AU 9352763    A  19940714 (199432)              A61K031-575     <--
     CA 2112824    A  19940707 (199435)              A61K031-575     <--
     JP 06234644   A  19940823 (199438)        7p    A61K031-575     <--
     ZA 9400025    A  19941026 (199444)       18p    A61K000-00
     CN 1096197    A  19941214 (199549)              A61K031-575     <--
     AU 673555     B  19961114 (199702)              A61K031-575     <--
     US 5604216    A  19970218 (199713)        5p    A61K031-56
     NZ 250583     A  19970822 (199741)              C07J009-00      <--
     EP 606012     B1 19980715 (199832)  EN          A61K031-565
        R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
     DE 69319710   E  19980820 (199839)              A61K031-565
     ES 2119871    T3 19981016 (199849)              A61K031-565
     RU 2142468    C1 19991210 (200043)              C07J009-00      <--
ADT  EP 606012 A1 EP 1993-310599 19931229; NO 9400035 A NO 1994-35 19940105; AU
     9352763 A AU 1993-52763 19931230; CA 2112824 A CA 1994-2112824 19940105;
     JP 06234644 A JP 1994-338 19940106; ZA 9400025 A ZA 1994-25 19940104; CN
     1096197 A CN 1994-100242 19940106; AU 673555 B AU 1993-52763 19931230; US
     5604216 A US 1994-178553 19940106; NZ 250583 A NZ 1993-250583 19931223; EP
     606012 B1 EP 1993-310599 19931229; DE 69319710 E DE 1993-619710 19931229,
     EP 1993-310599 19931229; ES 2119871 T3 EP 1993-310599 19931229; RU 2142468
     C1 RU 1994-61 19940105
FDT  AU 673555 B Previous Publ. AU 9352763; DE 69319710 E Based on EP 606012;
     ES 2119871 T3 Based on EP 606012
PRAI GB 1993-125      19930106
REP  3.Jnl.Ref
IC   ICM  A61K000-00; A61K031-56; A61K031-565; A61K031-575;
          C07J009-00
     ICS  A23L000-00; A61K007-00; A61K007-48; C07C000-00; C11C000-00
AB   EP    606012 A UPAB: 19940824
```

The use of an ester of cholesterol and a fatty acid selected from n-3 to n-6 essential fatty acids (EFAs), parinaric acid and columbinic acid, in a pharmaceutical skin care or nutritional compsn. is new.

Cholesteryl esters of n-6 and n-3 EFAs, parinaric and columbinic acids are new.

Pref. the compsn. contains more than 20wt.% of fatty acid ester relative to total fatty acid (pref. more than 40%, more pref. than 70%, and partic. more than 90%). The cholesterol ester is 0.01-60wt.% of the final formulation (pref. 0.1-30% more pref. 1-10%).

USE/ADVANTAGE - The compsn. is useful for treating conditions in which it is necessary to facilitate transport of the fatty acid into the intracellular compartment or in which a stable form of the fatty acid, not readily oxidised, is required. Conditions which can be treated include cancer; atherosclerosis; diabetic complications e.g. neuropathy, retinopathy and cardiovascular disease; disorders involving inflammation, e.g. rheumatoid arthritis, osteoarthritis, eczema, inflammatory bowel disease, psoriasis and the autoimmune gp. of diseases; cerebral and psychiatric disorders, e.g. schizophrenia, alcoholism, and dementias including Alzheimer's disease and multi-infarct dementia. Daily dosage of cholesterol ester is 1mg-100g (pref. 100mg-20g, esp. 500mg-10g). The esters are exceptionally resistant to oxidn. and are partic. useful in topical formulations which are spread thinly on the skin and exposed to high levels of O2.

Dwg.0/2

FS CPI
FA AB; DCN
MC CPI: **B01-D02**; B14-C03; B14-F01; B14-F07; B14-G02; B14-H01; B14-J01; B14-N03; B14-S01
ABEQ US 5604216 A UPAB: 19970326

A pharmaceutical or nutritional composition comprising at least 10% by weight of a cholesterol fatty acid ester, wherein the fatty acid is selected from the group consisting of gamma-**linolenic** acid, dihomo-gamma-**linolenic** acid, adrenic acid, the 22:5 n-6 acid, stearidonic acid, the 20:4 n-3 acid, eicosapentaenoic acid, docosahexaenoic acid, the 22:5 n-3 acid and columbinic acid, in association with a suitable diluent or carrier.

Dwg.0/0

L115 ANSWER 2 OF 6 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN **1986-186011** [29] WPIX
DNC **C1986-080045**
TI Compsn. for improving serum lipid action - contg. tri terpene alcohol(s) and unsatd. oil.
DC B05
PA (PALA-N) PALA KASEI KOGYO KK
CYC 1
PI JP 61118318 A 19860605 (198629)* 5p
JP 05042411 B 19930628 (199328) 5p A61K031-575 <--
ADT JP 61118318 A JP 1984-238181 19841112; JP 05042411 B JP 1984-238181 19841112
FDT JP 05042411 B Based on JP 61118318
PRAI JP 1984-238181 19841112
IC A61K031-04; A61K035-60
ICM **A61K031-575**
ICS A61K031-04; A61K031-23; A61K031-355; A61K035-60; A61K035-78
AB JP 61118318 A UPAB: 19930922

Composition having serum lipid improving action, contains a mixture of one or more triterpene alcohols selected from cycloartenol, 24-methylcycloartenol and 224-methylenecycloartenol and one or more unsatd. oils having 3 or more double bonds.

The unsatd. oil is e.g. used eicosapentaenoic acid, eicosatetraenoic acid, docosahexaenoic acid, **linoleic** acid, ester thereof, triglyceride containing them, etc.. It is pref. to add antioxidant to the composition. Antioxidants are BHT, BHA, vitamin E, etc. and used at 0.005-2.0 wt.% The ratio of blend triterpene alcohol to the unsatd. oil is pref. 1:500-1:2, 1:50-1:10. The composition can be used for starting

material for food and medicine, and can be formulated as tablet, capsule, liquid, paste, etc..

ADVANTAGE - The composition prevents various diseases (e.g. artherosclerosis, thrombosis, myocardial infarct) due to the increase of blood cholesterol. The composition keeps the amount of blood cholesterol normal and increases the ratio of HDL cholesterol in the blood cholesterol.

0/0

FS CPI

FA AB

MC CPI: **B01-D02**; B04-B01C; B10-C04E; B10-G02; B12-F01B; B12-H02; **B12-H03**

ABEQ JP 93042411 B UPAB: 19931116

Compsn. having serum lipid improving action, contains a mixture of one or more tri-terpene alcohols selected from cycloartenol, 24-methylcycloartenol and 224-methylene cycloartenol and one or more unsatd. oils having 3 or more double bonds.

The unsatd. oil is, e.g., used eicosapentaenoic acid, eicosatetraenoic acid, docosahexaenoic acid, **linoleic** acid, ester, triglyceride contg. them, etc. It is pref. to add antioxidant to the compsn. Antioxidants are BHT, BHA, vitamin E, etc. and used at 0.005-2.0 wt.%. The ratio of blend tri-terpene alcohol to the unsatd. oil is pref. 1:500-1:2, 1:50-1:10. The compsn. can be used for starting material for food and medicine, and can be formulated as tablet, capsule, liquid, paste, etc.

ADVANTAGE - The compsn. prevents various diseases (e.g., arthersclerosis, thrombosis, myocardial infarct) due to the increase of blood cholesterol. The compsn. keeps the amt. of blood cholesterol normal and increases the ratio of HDL cholesterol in the blood cholesterol.(J61118318-A)

L115 ANSWER 3 OF 6 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

AN **1986-008728** [02] WPIX

DNC **C1986-003683**

TI Tri terpenyl ester(s) of organic acids - useful for treating hyperlipidaemia and atherosclerosis and with low toxicity.

DC B01 B05

IN FUJITA, K; HIROSE, Y; KIMURA, G; KUZUYA, F; YOSHIDA, K

PA (AMAN) AMANO PHARM KK; (AMON-N) AMONO PHARM CO LTD

CYC 24

PI EP 166542 A 19860102 (198602)* EN 260p
R: BE CH DE FR GB IT LI NL SE
AU 8543130 A 19851212 (198606)
JP 60258119 A 19851220 (198606)
JP 60258198 A 19851220 (198606)
NO 8502246 A 19851230 (198608)
FI 8502216 A 19851205 (198611)
DK 8502469 A 19851205 (198623)
JP 61243022 A 19861029 (198650)
JP 61243099 A 19861029 (198650)
CN 85109752 A 19861217 (198749)
ES 8708125 A 19871201 (198801)
US 4748161 A 19880531 (198824)
JP 01040014 B 19890824 (198938)
JP 01040040 B 19890824 (198938)
CA 1265785 A 19900213 (199014)
EP 166542 B 19900808 (199032)
R: BE CH DE FR GB IT LI NL SE
SU 1538892 A 19900123 (199032)
DE 3579064 G 19900913 (199038)
US 4748161 B 19911015 (199144)
JP 05033713 B 19930520 (199323) 44p C07J053-00 <--
KR 9207235 B1 19920828 (199406) C07J005-00 <--

ADT EP 166542 A EP 1985-303839 19850530; JP 60258119 A JP 1984-115307 19840604; JP 60258198 A JP 1984-115306 19840604; JP 61243022 A JP 1985-85254 19850419; JP 61243099 A JP 1985-85255 19850419; ES 8708125 A ES

1985-544466 19850604; US 4748161 A US 1985-739183 19850530; SU 1538892 A SU 1985-3913136 19850603; JP 05033713 B JP 1985-85254 19850419; KR 9207235 B1 KR 1985-3819 19850531

FDT JP 05033713 B Based on JP 61243099

PRAI JP 1984-115306 19840604; JP 1984-115307 19840604; JP 1984-115406 19840604; JP 1985-85254 19850419; JP 1985-85255 19850419

REP 2.Jnl.Ref; A3...8628; FM 89; FR 89; GB 932662; JP 51056441; JP 57149248; JP 58011959; No-SR.Pub; US 3625194; US 3686235

IC A61K031-57; C07C069-61; **C07J005-00**; **C07J009-00**; **C07J053-00**

ICM **C07J053-00**

ICS A61K031-57; C07C069-61; **C07J005-00**; **C07J009-00**

ICA A61K031-575

AB EP 166542 A UPAB: 19930922

Triterphenyl esters (I) of organic acids, other than of mono- or di-basic satd. fatty acids or ferulic acid, are new. Pharm. compsn. for treatment of hyperlipidaemia comprises a triterphenyl ester (II) of an organic acid, other than of a dibasic satd. fatty acid, together with a carrier.

USE/ADVANTAGE - (II) have antihyperlipidaemic and antiathero-sclerotic activities, with low toxicity.(II) cause a significant depression of serum total cholesterol, with an increase in high density lipoprotein cholesterol.

Also the atherogenic index and lipid peroxide levels are simultaneously lowered. (II) have better antihyperlipidaemic activity than known triterphenyl alcohols and gamma-oryzanol.

0/0

FS CPI

FA AB

MC CPI: **B01-D02**; **B12-H03**; N01-D; N03-F

ABEQ EP 166542 B UPAB: 19930922

Triterphenyl esters (I) of organic acids, other than of mono- or di-basic satd. fatty acids or ferulic acid, are new. Pharm. compsn. for treatment of hyperlipidaemia comprises a triterphenyl ester (II) of an organic acid, other than of a dibasic satd. fatty acid, together with a carrier.

USE/ADVANTAGE - (II) have antihyperlipidaemic and antiathero-sclerotic activities, with low toxicity.(II) cause a significant depression of serum total cholesterol, with an increase in high density lipoprotein cholesterol. Also the atherogenic index and lipid peroxide levels are simultaneously lowered. (II) have better antihyperlipidaemic activity than known triterphenyl alcohols and gamma-oryzanol.

0/0

ABEQ US 4748161 A UPAB: 19930922

Novel triterpenyl ester is derived from (a) triterpenyl alcohol and (3) an organic acid other than ferulic acid, and mono-or dibasic satd. fatty acid.

Cpd (a) is cycloartenol, cyclobranol, 24-methylenecycloartanol, lanosterol, lanostenol, agnosterol, cyclosadol, dihydroagno-sterol, cyclolaudenol, cycloartanol, cycloencalenol, euphol, butyrospermol, triucallol, euphorbol, or dammerdienol. Cpd (b) is nicotinic acid, **linoleic** acid, or has formula Ar(CH=CR)nCOOH. R is H or (1-4C)alkyl; Ar is aminophenyl, nitrophenyl, hydroxyphenyl, a (1-4C)alkoxyphenyl, (1-4C)alkyl-CONH-phenyl, (1-5C)alkyl-COO(phenyl), (1-4C)alkoxyhydroxyphenyl, hydroxy(1-5C)alkyl-COO(phenyl), (1-4C)alkoxy(1-5C)alkyl-COO(phenyl) (1-4C)alkoxynitrophenyl, (1-4C)alkoxyaminophenyl, (1-4C)alkyl-CONH-(1-4C)alkoxyphenyl, di(1-4C)alkoxyphenyl, di((1-5C)alkylCOO) phenyl, or dihydroxyphenyl; and n is 0 or 1.

USE - In a compsn. for treating hyperlipidaemia. (53p)

ABEQ JP 93033713 B UPAB: 19931115

Triterpene alcohol esters are, e.g., of formula (I) with (a) a 1-4C alkylcinnamic acid having one or two substits. on the benzene nucleus or (b) benzoic acid or cinnamic acid, having two substits., selected from (i) 1-4C alkoxy and nitro, (ii) 1-4C alkoxy and amino and (iii) 1-4C alkoxy and 2-5C acylamino or the benzene nucleus. In (I), R is an organic acid residue. Prodn. of (I) comprises reacting a triterpene alcohol of formula

(II) with (a) a 1-4C alkylcinnamic acid halide having one or two substits. on the benzene nucleus or (b) a benzoic acid halide or a cinnamic acid halide having two substits. selected from (i) 1-4C alkoxy and nitro, (ii) 1-4C alkoxy and amino and (iii) 1-4C alkoxy and 2-5C alkylamino in the benzene nucleus.

USE - (I) are useful as hypolipaemic agents and can be administered in the form of tablets, granules, powders, capsules, sugar-coated tablets, emulsions, injections or suppositories at dialy doses of 0.01-5g, pref. 0.02-1.5g for adults. (J61243099-A)

L115 ANSWER 4 OF 6 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN **1975-47903W** [29] WPIX
TI Atherosclerotic dietary compsn - contains lecithin and beta-sitosterin to reduce cholesterol levels.
DC B05 D13
PA (RITT-N) RITTER D & CO
CYC 1
PI DE 2400518 A 19750710 (197529)*
PRAI DE 1974-2400518 19740107
IC A23J007-02
AB DE 2400518 A UPAB: 19930831
A dietary compsn which lowers the serum-cholesterol level e.g. when **linolic** acid-rich edible facts are eaten contains lecithin and beta-sitrosterin in a wt ratio of 4-1:1-2, pref 3-1:1 esp. 2:1. This reduces the amt (and cost) of lecithin which had previously been used and which had resulted in various degrees of incompatibility (stomach disorders, nauseousness, dermatitis etc) in many people.
FS CPI
FA AB
MC CPI: **B01-D02**; B04-B01B; **B12-H03**; D03-F; D03-H01T

L115 ANSWER 5 OF 6 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN **1966-26424F** [00] WPIX
TI Sitosterol octadecadienoate.
DC B00
PA (SUMO) SIMITOMO CHEM CO LTD
CYC 1
PI JP 42008379 B (196800)*
PRAI JP 1963-47255 19630904
AB JP 67008379 B UPAB: 19930831
Sitosterol octadecadienoate of the formula:

Decreases cholesterol in blood and liver and may be administered for long periods without substantial toxic side effects.

A mixture of 2.3 g sitosterol acetate, 1.9 g methyl **linolate** and 0.1 g powdery sodium methylate was heated at 100 to 120 deg.C under reduced pressure (20 mmHg) for about 3 hrs. (Thus, methyl acetate was obtd. in almost theoretical yield at the trap). The reaction mixture was dissolved in ligroin, filtered, and distilled to remove the ligroin. The residue was dissolved in 30 ml anhyd.ethyl alcohol, filtered at 0 deg.C to remove the insolubles, and the solvent distilled off to give (I).
FS CPI
FA AB
MC CPI: **B01-D02**; **B12-H03**

L115 ANSWER 6 OF 6 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
AN **1966-03121F** [00] WPIX
TI A pharmaceutical preparation for oral use, having anti-atheromatous and circulatory eutropic action, comprises an alcoholic solution of a mixture of one or more.
DC B00
PA (LROB) LAB ROBAPHARM
CYC 2
PI FR 697 M (196800)*
GB 931115 A (196801)

AB FR 697 M UPAB: 19930831
A pharmaceutical preparation for oral use, having anti-atheromatous and circulatory eutropic action, comprises an alcoholic solution of a mixture of one or more sitosterols and **linoleic** acid. The **linoleic** acid is pref "pure" and may be replaced in part by an oil having a high content of **linoleic** acid, e.g. corn germ oil. The sitosterol is a alpha- or a beta-sitosterol or a mixture thereof; a beta-sitosterol of m. pt. 134 deg.C. and formula C29H30O being preferred. Opt ingredients are (a) anti-oxidants, (b) dispersing agents and (c) flavouring agents.
FS CPI
FA AB
MC CPI: **B01-D02**; B10-C04; B12-E01; **B12-H03**